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AMESBURY ON FRACTURES.

ART. I. *A few Observations upon the Nature of Fractures of the Long Bones in general, and upon the Nature and Treatment of simple Fractures of the Humerus in particular; accompanied with a Description of a New Apparatus, illustrated by Cases.* By JOSEPH AMESBURY, Esq. Member of the Royal College of Surgeons, &c.

IN the sketch, which I have ventured to publish, of the treatment of simple fractures of the lower extremity, I have enumerated some of the evils which attend the common modes of treating fractures of the leg and thigh; and have endeavoured to point out some general principles of treatment, which, as far as I know, are altogether new.

Since I published this imperfect sketch, I have not seen the least occasion to swerve from any one of the principles which I there endeavoured to establish. Indeed, I may say, that every case, which has since fallen under my observation, has served to impress the importance of those principles more strongly upon my mind; and, although much has been written upon the treatment of fractures, by men no less distinguished for their natural talents than for their surgical acquirements, additional experience has convinced me, that

much still remains to be accomplished. Under this consideration, I again wish to draw the attention of my brethren to the further investigation of this important subject.

In the various conversations which I have had with Surgeons upon the nature, the degree of importance, and upon the treatment of fractures, I have often been forcibly struck with the different, and even opposite opinions which they seem to entertain. How shall we account for such disparity of opinion in cases where the nature of the injury is clear, and where the effects of remedies allow of demonstration? Thinking it may depend, in part, upon differences in the nature of the accident, which have not been sufficiently attended to, I shall make, first, some observations which may be regarded as common to fractures of the long bones in general; and shall then pass on to the consideration of simple fractures of the humerus.

Fractures of the long bones may be either transverse, oblique, or comminuted; and they may be considered according to the degree of injury done to the bone, and according to the degree of injury done to the soft parts; I shall therefore view them as consisting of fractures of the bone merely, or of fractures attended with much laceration of the surrounding textures.

Among the injuries which are confined to fracture of the bone merely, I believe one variety consists in a partial division or crack of the bone, which, for the sake of perspicuity, may be termed an incomplete fracture. I have been led to form this opinion from various experiments upon recent bones while covered by the soft parts. Upon examining these bones in a denuded state, I have found, that a fracture may extend in a transverse or oblique direction through a greater or less number of the fibres of a bone without passing completely through it; and that if a fracture of this description is attended with displacement, the displacement consists in a bent state of the bone, with a portion of the edge of one or more of the fractured surfaces projecting at the salient angle formed at the fractured part.

I have been led to suspect the existence of such a fracture in several patients, in consequence of my inability to produce motion in the injured part in more than one direction; from my being unable to produce this motion in any other way than by attempts to bend the bone; from the simultaneous movements of the upper and lower portions when the lower part was rolled; from the power which the patient experienced in the limb; and from the rapidity with which a perfect consolidation of the fracture was effected. I have not, however, yet had an opportunity of examining the limb of any patient who may have died with the existence of such symptoms as I have mentioned: but even in the absence of this proof, I think, the facility with which this kind of fracture may be produced in recently dead bones, is sufficient to warrant the conclusion that such fractures do occasionally occur in the living.*

I can readily suppose the application of a force which would be likely to produce a fracture of this description. A person, while standing in the erect position, may receive a blow upon the back of the leg; but the force acting upon the limb may be only sufficiently powerful to break through a portion of the diameter of the bone, which would give way first at its anterior part. The same kind of fracture might perhaps be sometimes occasioned by the passage of a heavy body over the limb as it lies upon the ground. If the fracture should extend nearly through the tibia, it would become evident to the Surgeon in attempting to bend the bone, though he would not be able to produce any rotatory motion in the seat of fracture. Such a case would require but little surgical assistance for its cure.

A second variety consists in a complete division of the bone, unaccompanied by any material laceration of the peri-

* Since I made these observations, I have discovered that Mr. Colles mentions that he has seen and examined fractures in the neck of the thigh-bone, which he believed to be of this description; but as some disease existed in the part, perhaps we are not justified in considering these cases alone sufficient to substantiate the fact.

osteum. This variety, which I believe is very common, may be called a complete fracture. It may be accompanied with slight displacement in the angular or in the transverse direction; and if the fracture be oblique, it may be accompanied with slight riding of the fragments. Oblique fractures of this description overlap very little at first; but after the expiration of a few days, under common treatment, they sometimes ride considerably. The increased displacement here alluded to, I presume, takes place as soon as the projecting portions of the fractured ends have made their way through the opposing periosteum and other textures, against which they are forced by the constant action of the muscles. Fractures belonging to this variety are, very generally, easily discovered. The fractured surfaces, however, occasionally become so locked together, that, in consequence of the simultaneous movements of the upper and lower portions, a nice examination is required in order to ascertain the exact nature of the injury.

Again; a bone may be comminuted without any considerable laceration of the periosteum. Should the comminution extend entirely through the bone, the fracture may allow of being as readily displaced as in fractures without comminution, when the periosteum is much torn, and may require as much attention during the period necessary for its cure.

Besides the above varieties, other fractures occur with great laceration of the soft parts, produced by the broken ends of the bone. The laceration which accompanies this variety of fracture is produced by the forcible separation of the fragments. It may take place at the moment of the injury, by a continuation of the force longer than is necessary to break the bone; or it may be produced after the accident, by the incautious movements of the patient. I do not mean to include under the head of laceration the contusion of the muscles, nerves, &c. arising from the blow or other force which may have occasioned the fracture, for this is common to fractures and other injuries; but I wish to confine it to

the injury done to the periosteum and other textures, in consequence of the displacement of the broken portions of the bone.

These fractures are usually so exceedingly evident, that the least motion of the limb informs the Surgeon of the nature of the injury. They produce much pain to the patient, and require a great share of the Surgeon's attention during the cure.

I might, with great propriety, consider compound fractures as belonging to the last variety, as the difference in these cases consists only in the degree of laceration of the soft parts. The injury done to the bone in compound fractures does not differ from the injury which is observed in simple fractures. The wound, however, which forms a communication between the bone at the seat of injury and the external air, places these cases under somewhat different circumstances; and, as the treatment differs in some respects, I shall hereafter venture to speak of them as a distinct variety; and I hope I shall be able to show that these formidable injuries are now robbed of many of their terrors.

Either of the above varieties of fracture may extend into a joint. This circumstance modifies the fracture sufficiently to authorize me to consider fractures extending into joints as a distinct variety; because they are often attended with high inflammation of the joint; and frequently, unless well attended to, anchylosis is the consequence.

I have thought it right, on the present occasion, to make these few general remarks upon the nature of fractures of the long bones, in order that the observations, which I am about to offer respecting the nature and treatment of fractures of the humerus, may not be misconstrued.

Fractures of the humerus may take place at any part. When they occur through the neck of the bone, it is sometimes difficult to ascertain the precise nature of the injury. The fracture sometimes extends through the bone at the part where it gives attachment to the capsular ligament. In these cases the ligament is occasionally so much torn as to allow

of the escape of the head of the bone from the glenoid cavity of the scapula.

Through the politeness of Mr. Travers, I witnessed, a short time ago, an inspection of the shoulder of a man who had the neck of the humerus fractured by a fall; and the parts presented the following appearances:—The head of the bone was broken off at that part which in anatomical language is called the neck, forced from its natural situation, and was found lying in the axilla. Both tubercles were broken from the shaft of the bone, and were drawn in opposite directions. The shaft of the bone was drawn up by the action of the muscles, so that its upper end came in contact with the acromion scapulæ. Though two months had elapsed from the time of the accident, there was not the least appearance of an attempt at restoration. The man died from a rupture of the heart, and the preparation of the shoulder is now in the possession of Mr. Travers.

This man was a patient in St. Thomas's Hospital, where I had an opportunity of seeing him frequently during life, and of observing the symptoms of his accident, which were these:—The least attempt to raise the arm even passively gave him great pain. The upper end of the shaft of the bone occupying the natural situation of the head prevented the deltoid muscle from falling in, so as to present the usual appearances of fracture of the neck when accompanied with much laceration of the soft parts. This part of the bone could be distinctly felt through the muscles, moving when the arm was rotated, and giving the same kind of sensation to the fingers as when the head of the bone is made to roll under them. When the bone was forced up against the acromion, and, at the same time, rotated, the motion gave great pain, but was not accompanied by crepitus. When the bone was drawn down gently, and then rotated, a crepitus was discovered, which sometimes gave that kind of sensation to the fingers which we should expect to experience by rotating the head of the bone in a bed of rough pebbles. A preternatural fulness was felt in the axilla,

which gave the sensation of crepitus when pressed towards the humerus, at the time this bone was rotated. Considerable tension continued round the joint to the period of his dissolution.

The cases of this kind that have fallen under my observation have occurred in old people.

Fractures often occur immediately below the tubercles. These, when complete, are usually easily discovered. When the fragments are brought in a line and the head of the bone fixed, the lower portion should be gently raised, so as to bring the ends in contact, and then by rotating the lower fragment, crepitus may be felt.

I have seen these cases in the young, the old, and in the middle-aged.

But the most common situation of fracture of the humerus is through the middle of the bone. When the upper portion is fixed, crepitus may be felt in the same way as in fractures through the bone just below the tubercles. A joint-like motion may be perceived by moving the lower portion in different directions.

Fractures through the middle of the bone are common at all ages.

Sometimes fractures happen immediately above the condyles. The appearances in these cases are the same as those of dislocation of the ulna and radius backward, but often much less strongly marked. Extension removes the appearances of dislocation, but these appearances return as soon as the extension is discontinued. Usually a crepitus may be felt when the fore-arm is moved so as to produce a rotatory motion between the upper and lower portions of the fracture.

This accident happens at all periods of life; the state of the bone, however, renders children much more liable to it than persons more advanced in age.

Fractures frequently take place through the inner condyle. The fracture usually extends in an oblique direction from the trochlea of the os humeri to just above the inner con-

dyle. The symptoms of this accident are thus described by Sir Astley Cooper:—"The ulna projects backward from having lost its support. If the fore-arm be extended, the hand becomes twisted inward towards the side; but upon flexion these appearances are removed." These symptoms, with the crepitus which might be felt upon "bending and extending the arm," are diagnostic of this injury.

Fractures of the outer condyle occasionally occur. The fracture usually extends from the trochlea obliquely outward to just above the outer condyle. Sometimes a small portion of the condyle only is broken off. In these cases crepitus may be felt by moving the fore-arm upon the humerus; or by moving the condyle while the body of the humerus remains fixed.

In taking a general survey of the diagnostic marks of fractures of the humerus, as they occur in different situations, I have confined myself to the enumeration of such as may be considered pathognomonic symptoms.

There are other symptoms usually laid down, in speaking of fractures of this bone, such as tension and pain in the part, and want of power in the limb; but these I have refrained from mentioning, because they may exist independently of a fracture; and when they occur after an accident, they merely show that some violence has been sustained. The deformed appearances of the limb, which are spoken of by authors, I have also purposely omitted in the above enumeration. I have done so because I regard deformity as a collateral symptom, to be met with only in any considerable degree in fractures attended with much laceration of the surrounding textures; and as the indiscriminate mention of its appearances, as a symptom always to be looked for, is, in my humble opinion, calculated to mislead the inexperienced Surgeon, the observations I shall offer upon this symptom must be considered as applicable only to fractures of this description.

Fractures of the humerus, accompanied with any consi-

derable laceration of the soft parts, are usually attended with derangement of the fragments.

When the fracture passes through the bone just below the tubercles, the deformity is produced by the action of the pectoralis major, latissimus dorsi, and teres major; which being attached to the lower portion, near its superior extremity, draw it first inward and then upward. In the last direction it is powerfully forced by the action of the biceps, coraco-brachialis, and long portion of the triceps. The superior portion will be directed a little outward by the action of the supra-spinatus, the infra-spinatus, and teres minor, which make the head of the bone perform a rotatory motion in the glenoid cavity of the scapula.

When the fracture occurs between the insertion of the pectoralis major and the insertion of the deltoid muscle, the inferior portion is first drawn outward, and then upward on the external side of the superior. The cause of this position of the fragments is evident. The adductors draw the upper portion to the chest; and those muscles which arise above, and are inserted below the fracture, draw up the lower portion on the outer side of the upper.

Fractures just below the insertion of the deltoid muscle are often attended with great derangement of the fractured ends. The deltoid muscle raises the upper portion; and the lower is drawn up on its inner side. Sometimes the fractured surfaces are separated considerably from each other. In a case of oblique fracture that has lately come under my observation, the distance between the fractured ends of the bone allowed the finger, carrying the integuments and a portion of muscular fibre before it, to lie between them, when the arm hung steadily in the bent position by the side.

Fractures near the lower end of the bone, when oblique, are subject to great derangement of the lower portion; but when transverse, the displacement is not so great as in other situations—an effect which is to be attributed to the greater

size of the bone at this part, and to the retentive power of the muscles arising from its surface.

In fractures of the inner condyle, extending through the bone in an oblique direction, the position of the broken portions is influenced by the position of the ulna with respect to the humerus. No displacement will appear when the arm is bent, but in the extended position the displacement will be evident.

When the fracture extends obliquely through the outer condyle, the broken portion may be drawn a little backward by the action of the anconeus.

Though I have here mentioned the more common varieties of displacement in fractures of the humerus, it is not to be considered that the fractured ends will always be found deranged in the same direction even in fractures that may seem to be similarly situated. It will immediately appear, that the direction in which the different portions become displaced, is greatly modified by the direction which the fracture takes through the bone. The degree of laceration of the soft parts will also contribute to influence the direction of the fragments, in whatever situation the fracture may occur. Suppose, for instance, that a fracture extends obliquely downward and inward through the lower portion of the bone, what would be the probable direction in which the lower fragment would become displaced? Would it be drawn up on the inner side of the upper portion? Certainly not; because the fractured surface of the upper portion lying on its inner side would prevent the muscles from drawing it up in that situation; it would therefore be drawn up on the outer side of the upper portion, inclining a little forward or backward at the seat of injury, according to the degree of flexion or extension of the fore-arm, and the degree of laceration of the soft parts.

In my observations upon simple fractures of the lower extremity, I endeavoured to show, that a principal object, in the treatment of these injuries, should be to fix the whole limb by some unyielding substance, continued from one end

to the other. Let us now see how far the same principle will apply in the treatment of fractures of the humerus.

Like the thigh-bone to the pelvis, the humerus is articulated to the scapula by a ball and socket-joint. The former is connected to the tibia by a joint that has a hinge-like motion; and in this respect it does not differ from the kind of joint that connects the humerus to the bones of the fore-arm. They are also both acted upon by powers which tend to displace the fragments of a fracture in the transverse and in the longitudinal direction. Now, as these two bones are connected by the same kinds of joints to the bones above and below them, and as they are both liable, from the action of muscles attached to different parts of their surfaces, to be displaced in various directions when broken, we may ask what makes the great difference in the treatment of a fractured humerus and a fractured femur? The humerus, it will be seen, is so situated, with regard to the other parts of the body, that it may be allowed to hang by the side when fractured; and that, when placed in this position, the gravity of the parts below the fracture serves materially to prevent displacement in the longitudinal direction. In the arm, too, the muscles are so thin that splints act more effectually in preventing lateral derangement of the fragments. The thigh, on the contrary, is so placed, that it cannot be kept in a depending state during the cure of a fractured femur. Here we see that the pendent position of the limb, in the treatment of a fractured humerus, is lost in the treatment of a fractured thigh. Again; the muscles surrounding the thigh-bone are so thick and powerful, that transverse displacement is easily produced; and, when the fracture is attended with much laceration, this cannot be prevented by any means which do not fix the whole limb. Thus we see, that from the position of the arm with respect to the trunk, and from the thinness of its muscles, we derive advantages in the treatment of a fractured humerus, from which we should conclude, even without a knowledge of the fact, that

the treatment of fractures of this bone is far more easy than the treatment of fractures of the thigh.

There is one point, in the consideration of these accidents, which applies equally, or nearly so, to fractures of the humerus, treated in the common way, and to fractures of the femur; and this is the rotatory motion produced in the site of fracture, by powers usually independent of the muscles of the limb. This our curative means should prevent, for it is a matter of no trifling nature as it regards the ultimate result. It is certainly more likely to take place in a fractured femur than in a fractured humerus, from the greater weight and greater length of the lower limb; but still the causes which produce it in the one, will also tend to produce it in the other. The short splints made use of in the treatment of fractures of the humerus, and frequently in the treatment of fractures of the thigh, have no power to prevent this motion from taking place. This, I think, will appear from the first experiment related in my paper on fractures of the lower extremities. If it needs further confirmation, it may be shown by two circular rods of any given length, with two of their ends brought into contact and surrounded by a piece of tube just large enough to admit them. If we take the projecting end of either of these rods, placed as I have mentioned, we shall find that, by carrying it out of a line with the tube, we shall move the rod which projects at the other end of the cylinder. But if we place the whole upon a plain surface, and attempt to rotate both the rods by the motion given to one, we shall perceive that the rod to which an impetus is given rotates freely within the calibre of the tube, while the other remains at rest. Now, a fractured arm or a fractured thigh, put up with short splints, is placed under circumstances every similar, as far as it regards the rotatory motion of the rods mentioned in this experiment. The only difference consists in the slight resistance which the muscles give to the rolling of the fragments, in consequence of their being placed as a soft cushion between the splints and the bone.

It will be observed that the rods thus situated cannot be moved in the lateral or longitudinal direction, and very little in the angular; and supposing them to be prevented from separating as they lie in a straight line, we can only produce a rotatory motion between them. Here we see that the rods can move in any considerable degree only in one direction; but the short splints surrounding a broken humerus not only do not prevent the rotatory motion to which the rods are subject, but they allow of displacement in three directions, lateral or transverse, longitudinal, and angular: therefore, we should infer that a broken humerus, put up with the common splints, is far less secure from the effects of passive motion accidentally given to the limb, than two straight rods whose approximated ends are placed within a portion of tube just large enough to admit them easily.

Indeed, if we lay aside for a moment the slight effect which the muscles have in preventing displacement, we may consider a broken humerus, put up with common splints, to be situated like two straight rods, with two of their ends placed in contact within a portion of tube *much larger* than is sufficient to admit them; and which therefore allows of considerable derangement of the approximated ends, as well as rotatory motion between them.

From what I have stated, it will be seen, that the muscles may oppose the derangement of the fragments of a fracture in three ways:—1st, By the attachment of their fibres round the fractured part. 2dly, By acting as a cushion between the splints and the bone. 3dly, Those muscles which arise above and are inserted below the fracture, tend, by their contraction, to keep the fractured surfaces from separating from each other, as long as the soft parts remain entire.

It has been said that, while the muscular fibres which surround the fracture preserve their attachment at the seat of injury, they tend to prevent displacement of the fractured ends; but suppose they are torn through, and the fracture is quite loose, will the support which they and the other soft parts give to the fracture, as a medium between the splints

and the bone, be sufficient to secure the fragments from lateral derangement—especially if the fracture is oblique? Certainly not. What, then, will become of the third retentive power, derived from the contraction of the muscles, which arise above and are inserted below the fractured part? This power, as soon as transverse displacement is effected, instead of retaining the fractured ends in contact, causes them to ride; and if this is not prevented, deformity is the consequence.

But it is not the lateral displacement of the fractured ends, and the consequent displacement in the longitudinal direction only, that demand our attention: we must guard against angular displacement; by which I mean such a position of the extreme ends of the fractured bone as causes an angle to be formed at the seat of fracture: we must also guard against rotatory motion, which may be occasioned by an impetus given to the limb below the fractured part. Our business is to prevent every kind of derangement, whether lateral, longitudinal, or angular, and thereby to prevent deformity; and every kind of motion between the fractured surfaces, and thus to ensure reunion. Are these indications answered by the common short splints?

In taking a general survey of what has been laid down by some authors who have written upon this subject, we are almost led to suppose that fractures of the humerus are unimportant accidents; that there is little to be done in the treatment; and that the surgeon may confidently expect a favourable result. But I would ask the ingenuous and experienced surgeon the result of his observations in the treatment of those cases which have come within his notice, and which have been treated by the common means. Has he not found it necessary to remove and repeatedly reapply his splints during the cure? Has he not frequently, in doing this, produced motion between the fractured surfaces of the bone? Has he not often found, on visiting his patient, that his splints and bandages were loose and disarranged? Has he not often experienced great difficulty in keeping the frac-

tured surfaces in apt and proper contact? Has he not occasionally found all his efforts ineffectual in preventing the occurrence of deformity? Has he not often noticed the cure to be long and tedious? Has he never met with cases in which all his endeavours to produce a union of the bones failed to be successful? Then, who is there acquainted with the treatment of fractures of the humerus, that would say that the common means are sufficient for all the purposes required? Is the prevention of deformity and non-union of no importance to our patients? Is the frequency of their occurrence no stigma on our Profession? It might be said that the short splints have been used, and fractures of this bone have generally united. So a few years ago, even in this country, stumps were allowed to heal by the granulating process; many of them did well; but who will deny the great advantages arising from the present plans of treatment? I am aware that the best contrived means may be brought into discredit by the mal-practices of the careless and unskilful; but the treatment of fractures of the humerus with the common short splints cannot be supported upon principle; nor are they found sufficient to answer the indications which present themselves, even in the hands of the most unskilful surgeons. Is it, then, enough because fractures of the simplest kind unite without deformity—is it enough because non-union is met with comparatively seldom—that we should still go on in the beaten path, and not try to avoid those modes of practice, the results of which disgrace us daily? I am disposed to believe, that my candid and scientific brethren will agree with me in thinking, that here the treatment of fractures calls loudly for improvement. It is our business to discover wherein the means we employ in the treatment of any disease or accident fail to answer our intentions; and to suffer such as are discordant with the soundest principles to sink into oblivion, and to adopt in their stead such as are more safe and found to be more suitable.

In the treatment of fractures of the humerus, as in the

treatment of fractures of the thigh, our first object should be to fix the whole limb so far as to prevent any motion given to it from being felt in the situation of the fracture. In doing this the hand should be guarded from accidental alterations in position, though, from the great mobility of the wrist, I do not think that *slight* and *gentle passive* motion would be at all likely to affect a fracture of the humerus, even if it were of the loosest kind. Flexion and extension of the fore-arm should be prevented. The elbow-joint should be perfectly fixed during the union of the bone.

It has been seen that the humerus is articulated to the scapula and bones of the fore-arm by the same kinds of joints that connect the femur to the pelvis and the tibia. Hence it will appear, that the points of difference, in the treatment of the fractures of these two bones, must be drawn from the difference in their form, and from the difference in their situation with respect to the trunk. If the inferior extremity were attached to the scapula instead of to the pelvis, the treatment of a fractured thigh would differ very little from the treatment of a fractured humerus.

In the treatment of a fractured humerus, the curative indications which require to be answered by mechanical means, are, in my humble opinion, two :—1st, To fix the fore-arm and humerus at a right angle, so that any motion given to them may have its centre in the shoulder-joint; 2d, To prevent the fragments, when once placed right, from being deranged from the involuntary action of the muscles, or by any accidental motion *passively* given to the limb below the fractured part. An apparatus, used for these purposes, should be so contrived as to admit of being easily adjusted, and so as to maintain the situation with respect to the limb in which it is first applied, without producing more pain or inconvenience to the patient than necessarily arises from the proper confinement of the parts.

As no contrivance, hitherto published, that I am acquainted with, can be made to answer these indications, I have invented an apparatus which appears to be calculated

to answer all the purposes for which an apparatus is required, till the process of union is completed.

The apparatus to which I allude consists of three portions of beech, two of which are fixed together at a right angle; and the other is straight, and of the length of the humerus. The two portions connected are long enough to reach from the head of the humerus to the wrist. They are about two inches wide, and are excavated to the depth of about a quarter of an inch. That portion destined to lie upon the upper arm has two straps attached to it transversely. Each of these straps is armed with a buckle, and is long enough to reach about three-fourths round the arm. One of the straps is fixed to the splint close to the angle formed by the junction of the two portions of beech; and the other a little below that part of the splint, which is made to lie by the side of the tendon of the pectoralis major; and in such a way that the buckles lie upon the splint. Another strap is fixed to that part of the splint intended to lie upon the forearm, close to the angle formed by the junction of the two pieces of beech. Two studs are also placed upon this part of the splint, one in the middle and the other near its end, for the reception of straps destined to pass round the forearm. The other splint is of the same width as that last described, and of a length to reach from the head of the humerus to the lower end of the bone. This splint has two leathern straps furnished with buckles attached to it in a line transversely to the splint, and opposite to the straps fixed upon that part of the angular splint, which is destined to take the line of the humerus. Each of these straps should be sufficiently long to reach about three-fourths round the arm, and should be attached so as to be received by the buckles placed upon the angular splint. This splint is hollowed out about one-fourth of an inch at its upper part; and the depth of the excavation is gradually diminished to within two inches of the lower end, where the splint is left quite flat.

What I have above described constitutes the whole of the

apparatus.* But, besides this apparatus, it is proper, in order to add as much as possible to the comforts of the patient, and to secure the fracture from every kind of derangement and motion, to make use of three other splints, which may be made of split deal, in the common way. One of these should be long enough to reach from the arm-pit to the inner condyle, another from the point of the shoulder to the outer condyle, and the third from the elbow to the fingers.

Having now given a description of the apparatus, and mentioned the length and number of common splints I use with it, it remains for me to show the manner in which it is to be applied to the limb. This, in general, should not be done till the high inflammation produced by the injury is considerably got under, which is usually in about three or for days, more or less, according to the degree of injury of the soft parts; but if the bones ride, or if the patient is restless, it is proper to apply it lightly as soon as possible after the accident.

The Surgeon should place the fore-arm so as to form a right angle with the humerus, and then support the integuments, by means of a spiral bandage, as high as the fractured part. This part, being nicely adjusted, should be surrounded with strips of soap plaster, which should be drawn moderately tight. The surgeon having pads properly made for each splint, should now commence the application of the apparatus, by placing the angular splint upon the fore-arm; and then the longest deal splint, with a tape extending along its outer surface, in the ordinary way, should be placed beneath the for-arm and hand. This splint and the angular splint should now be confined to the fore-arm by means of the proper straps attached to the latter. This being done, the fore-arm should be given to an assistant, who should keep it at a right angle with the humerus; and, if the frag-

* The same apparatus admits of being applied to adult arms of various lengths and sizes.

ments ride, he should bed irected to draw down the fore-arm, while the Surgeon places the upper part of the angular splint in a line with the biceps muscle, and adjusts the fractured part. The straight splint belonging to the apparatus being placed upon the back of the arm in a line with the humerus, the assistant should be directed to support this splint and the angular one in their proper situation, with the fractured bone between them. The surgeon should then place a piece of common splint on the inner side of the arm, so that it may extend from the axilla in a line with the bone to the inner condyle; and another on the outer side, extending from the point of the shoulder to the outer condyle. The proper straps fixed to the apparatus should then be carried over the splints and buckled moderately tight. It is advisable to place an additional strap round the limb between these, as it assists in keeping the splints steadily and firmly together. The arm should now be placed in a sling extending from the elbow to the hand, and just short enough to steady the arm comfortably as it hangs by the side.

When the Surgeon wishes to examine the fracture, he may do it without disturbing the fragments in the least, by removing the splint placed along the outer side of the arm, while an assistant keeps the apparatus from shifting its situation.

By this plan of treatment the parts are kept quiet in their natural position; and thus deformity is prevented, and nature is assisted in her efforts to consolidate the bone.

Here it might be asked, why are the splints not confined to the scapula in the same way as the apparatus for the lower extremity is confined to the pelvis, in the treatment of fractures of the thigh? A little consideration, however, will make it appear, that though the humerus is articulated to the scapula by the same kind of joint as that which connects the thigh bone to the pelvis, it is by no means necessary that the apparatus, described for fractures of the humerus, should be fixed to the scapula in the treatment of a

fractured arm. The scapula is placed at a part of the body where it may be kept at rest without any inconvenience to the patient. The situation of the scapula, therefore, may be regarded as even more than sufficient to compensate for the loss of that support which the thigh receives in consequence of connecting the splints to the pelvis. Hence we may conclude, that any connexion of the splints to the scapula may be regarded as superfluous.

It now remains for me to substantiate the utility of the apparatus which I have endeavoured to describe, by relating cases, for the cure of which it has been employed. In doing this I shall purposely refrain from mentioning any that have occurred in my private practice, as I have been kindly favoured with more than sufficient for this purpose by the Surgeons of the Borough hospitals.

April 15th, 1822.—John Alefounder, ætatis twenty-nine, was admitted into Guy's Hospital, under Sir Astley Cooper, for the cure of a fractured humerus. The fracture was occasioned by a fall from a height of twenty-five feet. It was situated a little below the insertion of the deltoid muscle, and extended through the bone in a direction slightly oblique.

I saw him the fourth day after the accident, and, at this time, the lower fragment was drawn up considerably, indicating the fracture to be of the loose kind. The fragments being placed in proper apposition, the apparatus was applied, and the man was directed to carry the arm in a sling. Three weeks after the accident the apparatus was taken off, and the bone was found straight and firmly united.

During the cure, I frequently moved the limb to show the pupils the power which the apparatus possesses in holding the upper portion, so as to make it move simultaneously with the lower, when the limb is passively rolled upon the scapula. Whenever the arm was moved, as here mentioned, the head of the humerus could be as distinctly felt rolling upon the scapula as if the bone were entire. The man never felt pain in the fracture from the rotatory motion

given to the limb, nor was the process of union retarded. These circumstances are sufficient to show, that the fractured surfaces remain at rest when the limb is passively moved upon the scapula by an impetus given to it below the situation of the injury.

Now, if this be granted, it can be of little consequence whether the impetus given to the limb be intentional or accidental, supposing it is passive, and not violently applied; for if the fractured surfaces are not disturbed in the one instance, it is not to be expected that they will be in the other: therefore we should infer, that the fracture is kept quiet at all times, when the whole limb is being gently and *passively* moved upon the scapula, provided that *no resistance* is made to the motions of the limb by the *voluntary action* of its muscles, and that the fracture is not so high up as to prevent the splints from holding the upper fragment firmly. Hence we should conclude, that the apparatus, by keeping the fracture quiet, favours a speedy consolidation of the fragments: and allowing this to be the case, the patient may reasonably expect the powers of the limb will be restored to him proportionably early; and as the pain occasioned by the derangement of the broken portions is avoided, as well as that which arises from repeated attempts to place them in their proper situation, the cure will be effected with much less inconvenience than he would experience under treatment by the common means. By this mode of treatment, too, the Surgeon will be spared from that painful anxiety which arises from the knowledge of the insecurity of the fracture, and from the consideration that his reputation would suffer from what it might not have been in his power to prevent—the occurrence of deformity or non-union of the bone.

John Barret, ætatis sixty-three, was admitted into St. Thomas's Hospital November 11th, 1822. A few hours before his admission, he fell down four steps, and pitched upon his elbow in the stone yard. The force of the fall produced a fracture of the humerus, which commenced a little above the condyles, and extended very obliquely

through the bone in a direction upward and outward. I saw him the fourth day after the accident. He was then in bed, with his limb lying upon a pillow. The lower fragment was drawn up from two to three inches. The limb was much swollen, and the man was suffering greatly. Short splints had been applied, but were found ineffectual in supporting the parts in their proper situation.

This man was under the care of Mr. Travers, who now politely offered me the treatment of the case. Assisted by his apprentice Mr. Dunkin, I applied the apparatus lightly, but at the same time, sufficiently close to prevent the fractured ends from riding. Two days after the application of the apparatus, the straps were tightened, and the man was desired to leave his bed, and carry the arm in a sling. February 28th, 1823, the apparatus was taken off, and the bone was firmly united.

In this case, it will be observed that nearly three months had elapsed before the consolidation of the bone was completed. I have selected it purposely to illustrate the effect of motion between the fractured surfaces, in retarding the progress of union, and to show the necessity of guarding against the voluntary action of the muscles.

This man was particularly dull of understanding, and could not be prevailed upon to keep the limb quiet. He frequently raised the arm by the action of the deltoid muscle, and thus caused the fractured surfaces to rub upon each other. He was frequently informed, that his omitting to comply with directions, in this particular, would retard his cure; but it was found he either did not comprehend or recollect the caution. The straps were therefore drawn closer, even to a degree which was painful to him; but crepitus was still produced by the voluntary action of the muscles, though none was felt when the limb was passively rolled upon the scapula. I felt convinced that union would not take place as long as motion was continued in the fracture; and, as reasoning was lost upon him, I bound the arm to the side, so as to deprive him of the possibility of raising

it by the voluntary action of the muscles; and, at the same time, shortened the sling, so as to keep the fractured parts closely applied to each other. After persevering in this plan for three weeks, I was happy to find that it had perfectly succeeded. The extreme points of the fractured ends could be felt when the fracture was united, and it was ascertained that the obliquity was above one inch and three quarters.

Sarah Cooke, ætatis sixty-two, much troubled with rheumatic gout, was admitted into St. Thomas's Hospital February 11th, 1823, under the care of Mr. Green. She had a transverse fracture of the humerus about mid-way between the insertion of the deltoid and the head of the bone, and a transverse fracture of the olecranon. Neither of the fractures was attended with any considerable laceration of the soft parts. The fracture of the humerus was easily discovered by rotating the lower portion, while the upper was fixed; and the fracture of the olecranon was equally distinct; but as the periosteum was not torn, the fractured surfaces were not separated from each other. Both the fractures were attended with great tumefaction in the affected parts, which was removed by rest in the horizontal position, and cooling lotions to the limb.

February 21st, I saw her, with Mr. Green, who kindly offered me the superintendence of the case. The apparatus was now applied, by his dresser Mr. Thomson, and she was directed to leave her bed, and carry her arm in a sling. March 22d, the apparatus was taken off, and the humerus was found united, and also the olecranon, by the interposition of bony matter. The callus which joined the olecranon could be distinctly felt through the integuments.

This case is interesting, inasmuch as it shows that her habitual disease, which had greatly enlarged the joints of her fingers, &c. and limited their motion, did not interfere with the process of union in the fracture; and that the apparatus is applicable in cases which are complicated with

fracture of the olecranon, when the periosteum remains untorn.

Several other cases of fracture of the humerus have been treated with the apparatus above described, in Guy's and St. Thomas's Hospitals, but the limits of this paper will not allow of their insertion.

I have some observations to offer upon the effects of this apparatus in the cure of fractures which have resisted the common means, but these I must reserve till a future period.

From the length of the present paper, I must also refrain from entering into the treatment of that variety of anchylosis which so frequently occurs after fractures extending into the elbow-joint. But this, as I have above hinted, in conjunction with the treatment of the same affection in the knee and ancle-joints, is of sufficient importance to form the subject of a future communication.*

Great Surry Street, Blackfriars' Road,
9th Aug. 1823.

Art. II. *On Rupture of the Uterus.* By Edwin A. Atlee, M.D. of Philadelphia.

Among the most probable *causes* of Rupture of the Uterus may be ranked the following:

First. The violent action of the uterus on the body of the child.—This cause, although it may be supposed to operate sometimes previously to the full term of gestation, yet rarely, if ever, has been known to occur, before the complete distention of the uterus, and its re-action for the purpose of expelling the fœtus. At this time, if the contractions be irregular and convulsive; if the body of the child be unequally pressed, or the *os tincæ*, owing to rigidity, or adhesion from previous inflammation, do not proportionally dilate; or if the dimensions of the *pelvis* of the mother

* Lond. Med. Repository, September 1823.

prove too narrow for the admission of the fœtal head: a rupture of the parturient organ may be the consequence, even though unaffected by disease antecedent to the accident.

At the commencement of labour, the uterus may be so disposed with respect to the fœtus, as equally to support its expulsive efforts; yet, toward the close of a tedious labour, obstacles of various kinds may weaken its substance in parts most pressed against by its firm contents, and these parts may yield.

Secondly. The uterus may be ruptured by external violence; a fall; strong pressure on the belly; the unskilful use of instruments, or of the hand.

A lamentable instance of external violence occasioning this horrid event, occurred several years ago in this city. A brutal husband had kicked the patient violently on the abdomen. Labour commenced on the day after the injury, with the escape of the liquor amnii. A midwife was promptly brought, but after very few slight pains the rupture took effect. I was sent for, and, on examination, found the head of the child about engaging in the superior strait, but *receding* from the *slightest pressure.* This circumstance, with the sudden prostration of the patient's strength, and her peculiar *anhelation*, caused me to suspect the event. At my request, Dr. Dewees was called in, who soon confirmed my fears, and extracted the child, which had in great part escaped into the abdominal cavity.

The rupture of this organ may take place at any point, but generally the *fundus*, *sides* or *neck*, as might, a priori, be expected, are found to have given way. The direction and appearance of the wound are various; sometimes its course is longitudinal, at other times transverse, oblique or semilunar; its edges appear sometimes even, at others, ragged.

The *signs* of this alarming accident, being necessarily obscure, and consequently no regular preventive plan being likely to be adopted, the practitioner is compelled to rely on his own judgment.

In the summer of last year, I was desired to attend the labour of a patient, whom I had twice before delivered by the forceps, of unusually large children, one of whom did well. Her pelvis at the superior strait, is disproportionally narrow from pubis to sacrum, and the gravid uterus projects greatly in front of it, towards the full period. As usual, her pains were strong, and labour difficult. Aware of the necessity and benefit of *patience*, which can scarcely be too much insisted on, I delayed the use of the forceps, after copious venæsection and enemata, and relieving the bladder of its contents, until an extraordinary effect of the pains alarmed me. They now seemed to act *reversely*, or rather in a direction intermediate between the *posterior side*, and *anterior fundus*, as if threatening to thrust the child through the parietes of the abdomen. I made several ineffectual attempts to apply the forceps of Baudelocque, and began seriously to anticipate the *crotchet:* but first proposed a consultation, witnessing the peculiar anomaly of the case; it was also apprehended that a rupture of the womb might soon follow, if the child were not taken away. Other repeated attempts with the forceps having failed, it was concluded, with a view to save the valuable life of the mother, to use the *crotchet*. I performed *embryulcia*, and brought a male child, which in all probability weighed 16 lbs. The mother did well.

The *symptoms* denoting a rupture to have taken place, are principally these: The patient feels an acute pain in the part, and suddenly cries out. Paleness and syncope supervene, the abdomen is changed in form, according to the part of the fœtus which has been thrust into the cavity; cold sweats, vomitings, convulsions, and death, close the scene.

But sometimes, I presume very rarely, the symptoms are not so clearly indicative of the accident as I had occasion to witness in the course of last winter, in the village of Columbia.

A respectable physician of that village, understanding I was there, called at my lodgings, and desired I might visit

with him, a patient, whose case was very obscure, and who was dangerously ill. She had been about three days under his care, having one day previously sent for a midwife to attend her labour, which was then supposed to have commenced. He learnt, that after a few trivial pains, all signs of labour had ceased, and the patient, who expressed no unusual *uterine* sensations, became suddenly very weak, complained of difficulty of breathing, dysury, and a painful distention of the abdomen. Venæsection, laxatives, enemata, and the catheter were resorted to, without relief. The symptoms becoming aggravated, a large epispastic was applied over the abdomen, and two other practitioners were called in consultation, who, from the unsatisfactory history of her case, were all of opinion that the disease was inflammation either of the uterus or peritoneum, inferring, from the slightness of her previous supposed labour pains, that parturition had not commenced. In this inference they were confirmed by examination *par vaginam*, finding a kind of thickening of its coats, and obstruction to the passage of the finger.

I first passed my hand over the abdomen, which was *uniformly* distended, and painful on moderate pressure; then proceeded to a more particular examination. She complained of *no pain* as I advanced my fingers toward the uterus. I felt the apparent thickening and folding of the vagina, and obstruction to the passage of the finger, and with considerable difficulty reached the *os tincæ*, thrown in an obliquely transverse situation above the symphysis pubis, and elongated to a mere fissure.

I gave it as my sentiment that *rupture of the uterus* had happened, founding my opinion on the folded state of the vaginal coat, the absence of heat in the parts, and the distortion of the os tincæ, all of which, I apprehended, were caused by the superincumbent pressure of the displaced child; the absence of heat contra-indicating inflammation of the womb. My views, however, not coinciding with those of my brethern, and my engagements requiring my depar-

ture, I told them that most probably her death that night, would allow them an opportunity of ascertaining.

On my return to the village at a late hour that night, I was informed of her decease, and advised an examination. I removed the abdominal integuments; the first object presented to view was a full grown male child, extended in front, with the head toward the pelvis of the mother, its abdomen against her intestines, and having the funis around the neck. Decomposition had begun, the cuticle had separated in many places, and the child was livid, and swelled with gas. On removing it from the mother, we discovered the membranes, about half emptied, lying partly over the contracted uterus; this was emptied of all its contents, and had a wound nearly crucial and now about two inches at the largest diameter, on the right side, and midway toward the fundus, in which a small portion of the placenta was caught.

Analogous to rupture is *ulceration* of the uterus, a solitary case of which, has recently occurred in my practice.

On the 30th of the ninth month (September) last, I was called on to attend the wife of J. D. M. who had not anticipated confinement until four weeks afterwards. The waters had suddenly been evacuated on the preceding day, and, in consequence of my absence from town, Dr. Shoemaker was so obliging as to visit her for me, at the request of my Son, who had been attending her a few days for dysentery; Dr. S. on examination discovered the presentation to be unusual, but her pains not being strong nor frequent, advised rest, and repeated his visits occasionally, until informed of my return, when he left her in my care.

The pains returning, I made an examination, and supposed I felt the *os tincæ* in a favourable position, dilated about two inches, but within it, the pendulous edge of the *placenta*. Passing my fingers cautiously toward the back of this orifice, I felt the head of the child posterior to this *supposed* placenta. On repeating the examination about an hour afterwards, with accuracy, I was undeceived, and alarmed at

the result; for, carrying my fingers toward the symphysis pubis, I found the os uteri somewhat elevated; its edges pouting, and impervious by the finger forcibly demanding entrance. Returning back toward the sacrum, my fingers attentively explored the parts, and I discovered what I had mistaken for the natural mouth of the womb and edge of the placenta, to be an *ulceration*, presenting its soft, ragged, and pendulous edges.

Apprehending serious consequences, and feeling my responsibility, the patient being the mother of a pretty large family, I intimated to her husband a wish to have farther advice. Dr. James was consulted, and the result confirmed my views. As the strength of our patient was much exhausted, he advised an opiate, and promised to see her with me the following morning, it being now late at night. She rested well until day-light, and in the morning the consultation was repeated. The pains were returning with regularity and increased force, dilating the accidental opening considerably. It was the Doctor's opinion that the dilatation might eventually be sufficient to permit the child to pass, and fortunately the opening being near the neck of the uterus, and the head determining itself toward the axis of the vagina, there were just grounds to hope for this event.

Very soon afterwards, the pains increasing, I administered a dose of the Ergot, which enabled me to prevent their subsidence before her strength entirely failed, and I delivered her of a still-born child, nearly full grown, through the ulcer, which had dilated anteriorly to within half an inch of the unyielding os uteri, and posteriorly to such a distance beyond the distended vagina, as to cause fears of some of the contents of the uterus escaping into the abdominal cavity. The placenta and membranes soon followed; the lochia flowed in the usual quantity and ordinary course, and my patient, after a series of much suffering and great debility, has recovered almost her wonted health, which was, I think, greatly accelerated by the sulphate of quinine, and landanum.

At the end of the month, she suffered acute pain in the ulcerated part, which was caused by the catamenia forcing a passage through the nearly cicatrized ulcer; but after finding vent, no untoward symptom worth mentioning occurred. As she is now in her 43d year, and menstruated early in life, I entertain a hope, that small monthly bleedings may obviate much future suffering.

ART. III. *Case of the efficacy of the Seton in Artificial Joint after a fracture of the fore-arm.* By JOHN BAXTER, M.D. of New-York.

IN the case now offered, both bones of the fore-arm were broken and remained disunited; the account of the restoration of the radius, is given by Dr. Ducachet in your No. 19, for July 1822; that operation had given such entire satisfaction, that the man was determined on its repetition for the defect which remained in the ulna. Dr. Ducachet having devoted himself to another profession, requested me to perform the operation on that bone, which I did on the 11th March, in the presence of Dr. Ducachet.

A small tumour was apparent on the radius where union had been effected, and that bone was perfectly firm. Motion of the broken ends of the ulna was very apparent, and they had sunk in towards the radius. The motion of the hand and arm were very limited; extension of the elbow produced a peculiar snapping noise at that joint.

The operation, which scarcely occupied ten minutes, consisted in passing a narrow sharp pointed bistoury through the arm, inwards and downwards between the ends of the bone, the flat side to those ends; an eyed steel probe introduced through this opening, was armed with a skein of white sewing silk and then withdrawn; the silk being wound round the arm, was secured with adhesive plaster. Dressings as usual, with pledgets for interstitial pressure between the

bones, were applied. Pain and inflammation came on in a few days, when splints were added.

In April, the pain and inflammation had subsided, the discharge was free, and the arm somewhat firmer.

In May it had gained much strength and firmness, but in consequence of carelessness in riding in a waggon and bad bandaging after, the dressings were kept loose, pain came on, and the ends of the bone became depressed towards the radius, for which interstitial pressure between the two bones was ordered to be particularly attended to.

In June, 14 weeks after the operation, union appeared to be progressing fast, and the seton was withdrawn ; this might have been done earlier had not the patient neglected to attend to it. In consequence of the splints not being retained after the seton was withdrawn, the depression exists at the place of fracture.

In July, less than four months after the operation, the orifices of the seton are entirely healed, and the arm can be used for all the common purposes of life, though not quite as strong as the other; it is shorter by one inch; the place of fracture seems entirely united, though depressed at the part.

This operation may not, perhaps, have been so successful in Europe as in this country, which in many instances there is reason to believe, has been owing to some peculiarity of circumstances. It is known here that want of apposition in the ends of the bones will produce a failure, as these ends in passing each other will render it next to impossible for the seton to be passed between them properly, and consequently for them to unite. It is not unlikely that this circumstance occurring to those not properly instructed in the niceties required, should have defeated the professional labours, and disappointed the hopes of some who have attempted it, inducing them to abandon it too hastily.

ART. IV. *A Bean extracted by the operation of Bronchotomy.* By JOSEPH PALMER, M.D.

ON the 8th of October, of the present year, one hour after the accident, I was called to visit a healthy, fleshy child of Captain N. Preston's, aged 20 months, and was informed by the parents that the child, while in the act of crying, was taken with choking, and for several minutes they thought it would suffocate; that at the time, it had beans in its hands, and that afterwards it had had frequent turns of choking.

I found the child's countenance flushed, lips purple, and respiration difficult, and, at intervals, so alarming as to threaten immediate suffocation. Two hours after the accident, the operation was performed, as follows: The *trachea* was opened immediately below the *cricoid cartilage*, but the incision not being sufficiently long to discharge so large a bean, it was extended by means of the probe pointed *bistoury*, to the length of at least one inch, down toward the sternum, when the bean was easily extracted by means of a flat probe. It was a kidney bean of the largest kind, and which so nearly filled the cavity of the trachea, that it was seen to rise and fall in respiration. The wound was closed by the interrupted suture.

On the 9th a gentle laxative was administered, and the child so well that it was allowed, contrary to orders, to run about the house.

11th. Had a restless night; some symptoms of inflammation in the trachea, which yielded to venesection and a cathartic of calomel: no more unfavourable symptoms; the trachea did not close until the 18th, as the air would pass out at the lower point of the wound, when the child cried or coughed.

By the 20th the patient was recovered.

ART. V. *A Case of Intestinal Polypus.* Communicated by Dr. ROBERT ARCHER.

THE subject of the following case was a lady about 50 years of age, of good constitution and plethoric habit. She had borne six children, and in the early part of her life was subject to frequent attacks of hæmoptysis, especially upon any irregularity of her catamenial discharge.

For the last 14 or 15 years she has had but one or two returns of that symptom, and ascribes the cause of her late sufferings to that circumstance. About fifteen years since, she began to complain of slight pain in the lumbar region, which was generally relieved by opening the bowels, and stimulating applications to the part. Every succeeding attack however appeared more severe than its predecessor. The ordinary means of relief having failed, an affection of the kidney was suspected, both from the situation of the pain, and an occasional derangement of the urinary secretion. Two years ago the symptoms became much more violent than they had ever been. The pain in the loins was so excruciating, as to make large doses of opium necessary to produce repose. There was no intermission of fever, and she was already greatly emaciated. In consequence of a slight constipation of the bowels, a cathartic was prescribed. During its operation, she complained of great pain, and a sensation as if her bowels were torn asunder; these symptoms increased, and she says she never suffered as much from the birth of a child, although her feelings were very similar. She was finally relieved by evacuating, *per anum*, a hard compact body of a spheroidal form, from two and a half to two inches and three quarters in diameter. Her health was soon reinstated; she has become very corpulent, and is in every respect better than she has been for 15 years.

The tumour exteriorly had a rough appearance, from a coat of indurated fœcal matter with which it was enveloped;

upon scraping it off, we came to the proper covering, which appeared to be the mucous membrane of the intestines. At the base, which was about an inch in diameter, and where it adhered to the intestine, it was detached, leaving the substance of the tumour uncovered and hanging down in irregular, ragged fragments. The tumour itself had the appearance of being *sarco-steatomatous;* that is, it possessed the characters of both, but could not critically be classed either with sarcoma or steatoma, and was intersected in various directions by very minute blood-vessels.

The most remarkable circumstance perhaps in the history of this case, is, that the alvine discharges should not have been obstructed. For no unusual symptom of costiveness was manifested at any time, except on the day previous to the administration of the last cathartic.

Art. V. *On the use of Diuretics.* By Dr. George R. Pitts, M.P.M.S. of Westmoreland county, Virginia.

Diuretics are considered a precarious class of medicines, and I am inclined to think, have not been duly appreciated by medical writers; who appear to have laboured rather to unravel their modus operandi, than to discover the diseases to which they are applicable.

I consider one established fact in medicine, of more utility than a volume of vague and preposterous reasoning The design of this, is only to call the attention of physicians to a few cases in which I consider diuretics are calculated to prove of infinite advantage. It is well known to medical practitioners, that bilious fevers are often succeeded by nocturnal colliquative sweats, which prove truly unpleasant to the patient, not only by preventing sleep, but exhaust the system, and retard the progress to convalescence. The relaxed and debilitated condition of the system, and more especially of the cutaneous vessels, would indicate tonics

and astringents, as the best remedies to suppress these morbid and preternatural excretions. The following case which came under my observation, will go to shew that they cannot always be relied upon.

H. L. was attacked with severe remittent bilious fever, accompanied with alarming appearances of a disposition to congestion of blood in the head; venesection and cathartics were freely used, and with the aid of epispastics, in about three weeks the disease was removed, leaving the patient extremely reduced in flesh and strength. After a few days convalescence, a hemorrhage from the nose occurred, which was checked after the loss of about one gallon of blood, by plugging the nostril with the end of a silk handkerchief, previously immersed in a strong solution of galls. The patient was now reduced to a state of extreme debility. His appetite, which had before been eager, became dull and capricious; his spirits depressed; his mind languid; his strength daily declining under these appearances, and the most profuse nocturnal colliquative sweats. As these increased in frequency and quantity, (notwithstanding the use of diluted vitriolic acid, and other tonics) his urine of course became scanty and deposited the brick-dust sediment. It occurred to the patient himself, that by increasing the discharge of urine, he might diminish that from the skin. Accordingly he drank freely of asparagus tea and whiskey. The first night the urine was increased, and the perspiration sensibly diminished; the second, these effects were greatly enhanced, and by the fourth, the urine resumed its natural quantity and colour, and the sweats entirely disappeared. A few days after, the patient discovered that the humours were again inclined to the skin; he however had recourse to, and persevered with his remedies, (during which time I saw him frequently,) and in ten days was permanently relieved, and when I last saw him, his appetite was restored, and his strength and vigour fast returning.

Notwithstanding the uncertain operation of many diuretics, I dont recollect ever to have administered either oil

of turpentine or asparagus tea, without producing an evident increase of the urinary discharge. I am informed by a gentleman, not of the profession, (but in whose statement I implicitly rely) that one table-spoonful of oil of tupentine, one of sulphur, and a small lump of pine rosin, mixed in a pint of whiskey,—a table-spoonful of which taken three times per day in a glass of water, is a certain remedy for gonorrhœa virulenta. As sulphur, however, is a certain and notorious sudorific, I am inclined to attribute the efficacy of the specific *entirely* to the turpentine, especially as the mixture produced a considerable increase of the urinary discharge. Professor Chapman in his Therapeutics, recommends balsam copaiva, as a valuable remedy for gonorrhœa, when given even in the incipient stage of that disease. Judging a priori, I should be inclined to think that so inflammatory a medicine as balsam copaiva, would be an unfavourable remedy for a disease of such phlogistic diathesis as gonorrhœa. I, however, entertain no doubt of the correctness of the Professor's statement, and am induced to attribute the virtue of the medicine to the diuretic properties it is known to possess. Is it not reasonable then to suppose, that the oil of turpentine, which is less inflammatory and more diuretic, is likely to prove the more expeditious and certain remedy.

ART. VI. *A case of extraction of a pebble from the Trachea, by the operation of Bronchotomy successfully performed.* By HORATIO G. JAMESON, M.D. of Baltimore.

ON the 14th of May 1823, Mrs. Alwell, from a neighbouring county, presented for examination her daughter, aged eleven years. I was informed that the patient while at play with a pebble in her mouth was suddenly alarmed by a sense of suffocation, coughed violently, and instantly perceived that the pebble had passed into the throat. Being alone

she ran in pursuit of assistance; meeting her father she attempted to speak of her misfortune, but it was not till after considerable effort that she was able to articulate owing to the cough and suffocation.

The symptoms soon became moderate except when she attempted to stoop, when she was affected with strong feelings of suffocation and coughing. During the week she remained at home, and nothing remarkable occurred; still she felt much oppressed in the chest, and was a good deal disturbed in her sleep.

When I first saw her she respired with tolerable ease; she had no cough, but when she made attempts to cough there was a peculiar ripping sound which attended it, and which I thought was so similar to that of the case in which the watermelon seed obstructed the trachea formerly reported, that I should almost have been willing to have operated without any other evidence. There was also a fulness about the eyes, giving the countenance slightly the aspect of a person in a state of suffocation, attended with a wheezing sound in the chest.

On the 15th my friends Drs. Handy, M'Cauley, Brevitt, Townsend, Amos and Harper were consulted, and the operation was determined upon from the following symptoms: We had the patient's assurance that she had swallowed a pebble eight or nine days before our visit—she could cough when she pleased, and the cough was quite peculiar—when the finger was placed high up on the throat and she was desired to cough, there was imparted the sensation of something striking against the finger—by holding the ear near her breast a wheezing was plainly heard—and by pressing the hand gently on the upper part of the sternum a labouring sensation was communicated corresponding with the wheezing sound.

In the presence of the gentlemen above named, I commenced the operation in the usual way, by making an incision about two inches long, terminating upwards, at the upper third of the thyroid cartilage. I found the tube smaller and

deeper seated than I expected; there was but little hemorrhage. Having laid bare the crico-thyroid membrane, I attempted with a sharp-pointed bistoury, to make a wound in the trachea downwards, but at the moment I passed it into the tube the patient from some cause was induced to swallow, and thereby raised the tube with the knife in it at least half an inch. I felt unwilling to trust a sharp-pointed bistoury in a part so moveable. I withdrew it and made my incision with a small scalpel; it extended downwards through three or four rings; I then reversed the knife and cut about a fourth of an inch upwards into the thyroid cartilage; a pair of forceps formed of silver wire, were now passed down with a view of feeling for the stone, but it could not be found. I passed my little finger into the trachea and thought I could perceive it at the upper angle of the wound, but I was still in doubt; on a more careful search I could not find it.* I now passed down a probang formed by passing an eyed probe through a piece of sponge and carefully sewing the two together; passing this down several inches and withdrawing it quickly, there was a violent expulsion of air through the wound; this was repeated two or three times, and a finger passed into the trachea to feel for the stone between each repetition. After two or three repetitions the child suddenly exclaimed that "it was gone." She was set up; she could no longer cough, the wheezing had ceased. She emphatically declared that it was gone, but still we saw no stone.

I now recollected that all the time I had stopped up the trachea, Dr. Harper, who was holding the patient's head, had placed his hand upon her mouth, with a view of throwing the whole force of the air to the wound. This, together with the confusion, suffering and fear, arising from stopping the breath, prevented the patient from perceiving that she had swallowed the stone. But from the remarkable allevia-

* I now believe that the stone was in the larynx, at the time I thought I felt it, and that it was from thence thrown into the mouth, by the forcible current of air which passed from the lungs.

tion of the symptoms in the case, I felt confident it had passed into the œsophagus; I was the more confirmed in the opinion, from the fact that on withdrawing the probang from the trachea at one time, the passage of the air through the wound was such as to carry a small coagulum of blood from the wound to my nose at a distance of nearly two feet, and strike so as to give the sensation produced by an ordinary hail-stone. This circumstance satisfied me, that no body having considerable bulk, could remain in a tube through which air had passed with such force. Still there was a possibility of being mistaken, since we had no certainty about the size of the pebble which she had swallowed. I therefore concluded upon leaving the wound open. The patient, though she suffered a good deal, bore it with unusual fortitude, and immediately after being superficially dressed walked into an adjoining room. She rested better by far than she had any night since the accident.

The next morning, by advice given on the evening of the operation, she took a dose of castor oil, and the nurse was directed to watch the evacuations with care. As soon as the oil operated, the stone was voided. She had some cough, and a good deal of mucous bloody discharge for three or four days, by expectoration. After the second day she had some fever, but it was not very considerable at any time. She was once bled, took two or three doses of Epsom salts, and used a very low diet. The wound was easily kept closed by means of adhesive strips; some air passed out a few days when she coughed. On the 4th or 5th day after the operation she began to sit up contrary to my advice, and owing to the weakness and soreness about the throat, her head became inclined to one side. But before she left town, two weeks after the operation, this had gone off except in a very slight degree. The wound was not quite closed, but nearly so; she looked well, and no air had passed through the opening for several days, nor had she any cough. The inclination of the head soon entirely disappeared.

It does not seem necessary to enter into any remarks up-

on this case. It comes seasonably to support practical views which have lately been doubted, and it shows that we may undertake the operation with confidence, resting our expectations chiefly on having the extraneous body thrown out by the air which is made to stimulate the respiratory organs into powerful action. Again, it seems to me we can make no safe reliance on the forceps for dislodging such substances as pins, fish bones, &c. from their situation low down in the trachea. Small hooks of different sizes, having single, double, and triple hooks connected, should be in readiness for the removal of thin sharp-pointed bodies. The forceps will, however, sometimes be found useful where light bodies lodge near the wound, as will often happen when they have passed into the windpipe. It will be recollected by the intelligent reader that this is not the first case where substances removed from the trachea, have been swallowed into the stomach.

It is truly surprising how the patient could have remained as easy as she was, during several days, with so large a body in the trachea. But although her sufferings were not particularly urgent, still she suffered much, and would doubtless soon have been thrown into dangerous or fatal diseases of the chest. By ascertaining the size of the calibre of the trachea, by passing in my little finger as far as it would enter, and afterwards measuring my finger and the pebble by means of callipers, I found them to have the sizes exhibited by the simple drawing accompanying this report. From this view it will appear extraordinary, how the patient could have respired as well as she did. And it will also appear evident, that as the wound was of some depth and at right angles with the *tube*, that an oblong body, whose broadest side reached from side to side of the trachea, could not raise out through the wound unless it had been larger than would have been safe or proper for a wound to have been made. But the two cases of bronchotomy which have been reported by me, go with many others to prove that such substances

CALORIMOTOR.

Fig. 1.

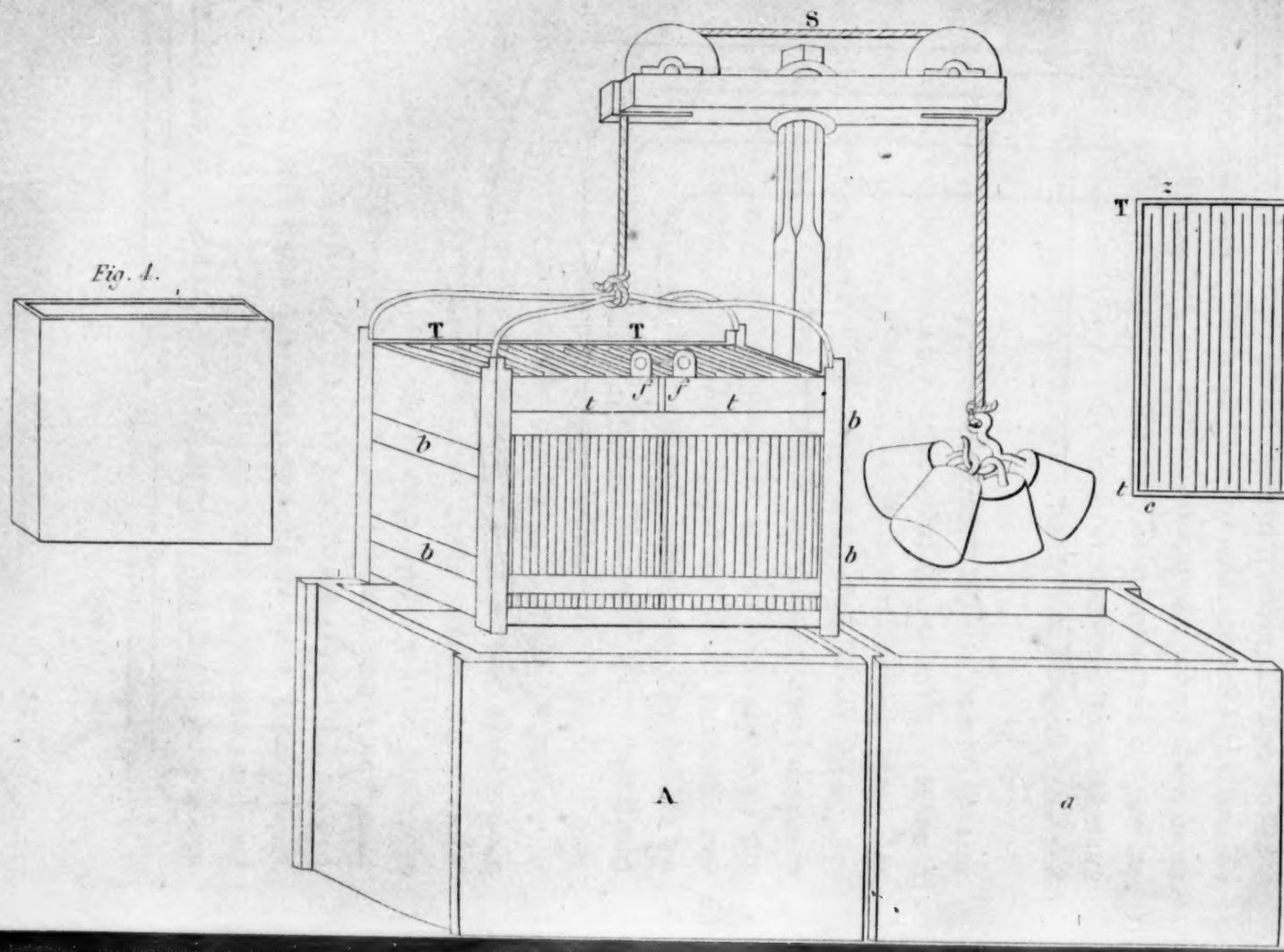


Fig. 4.

Fig. 2.

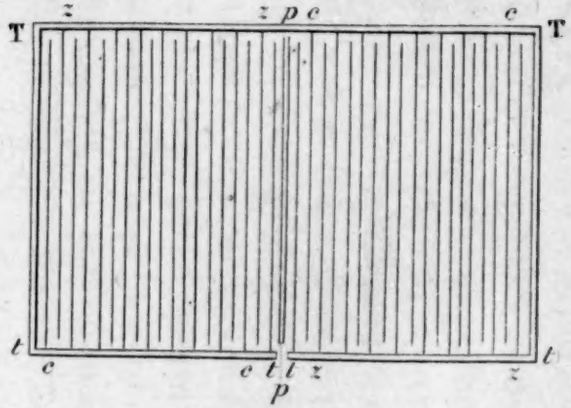
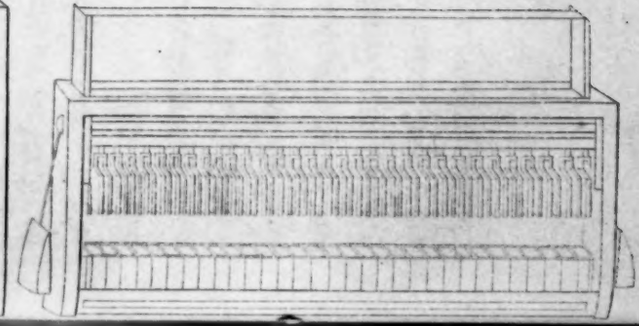
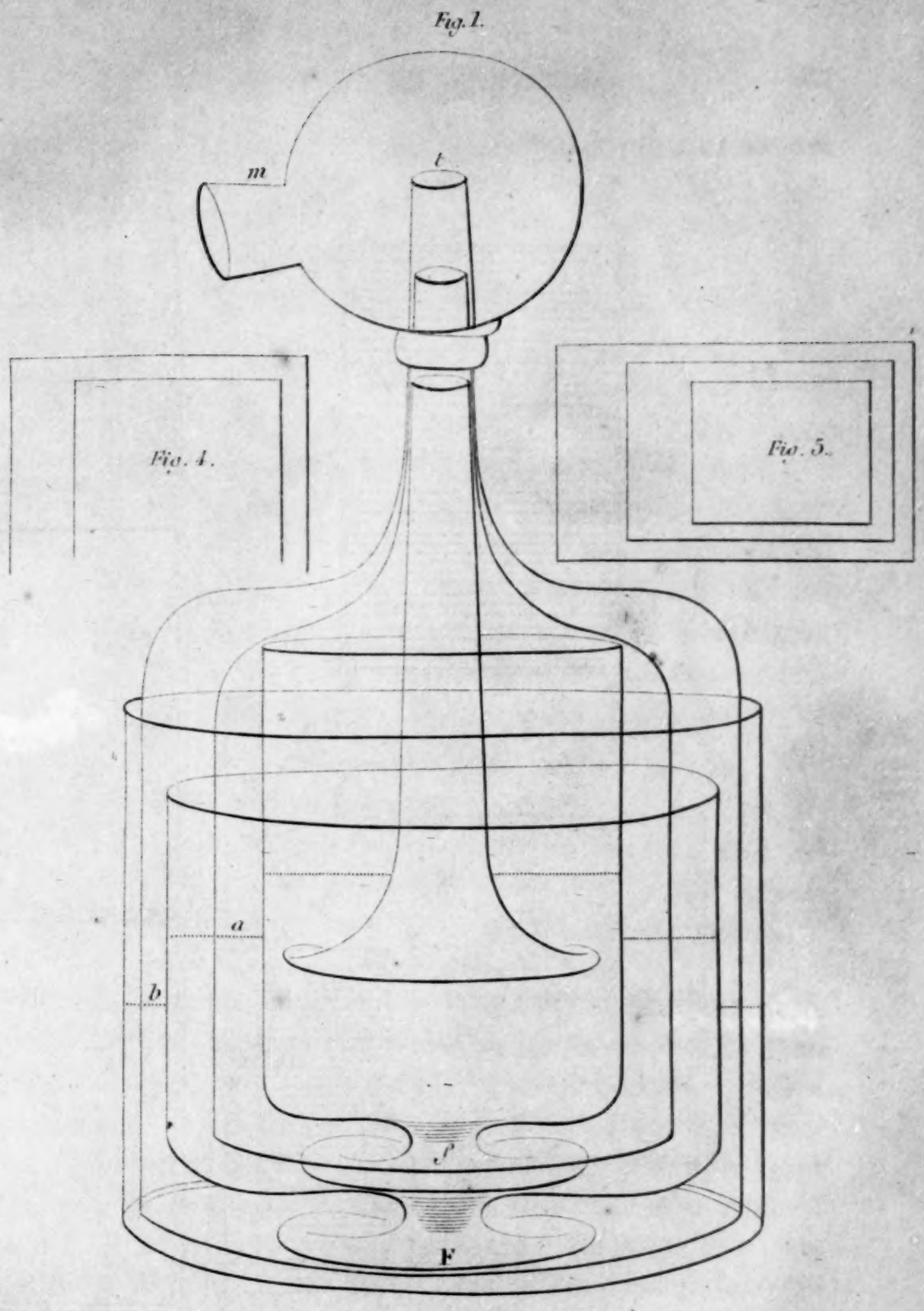


Fig. 3.





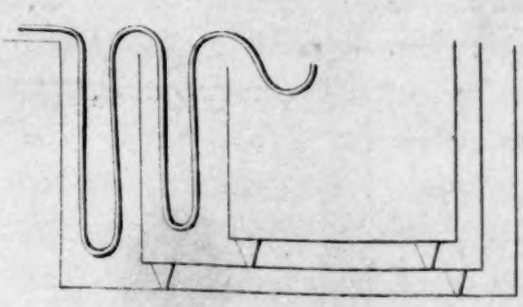


Fig. 3.

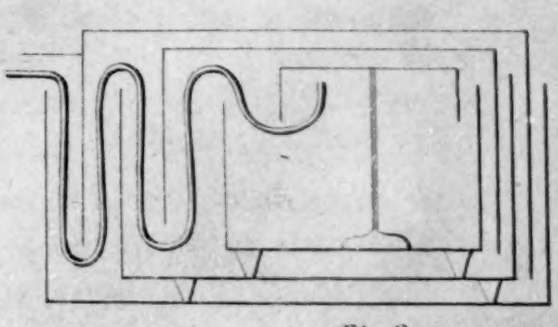


Fig. 2.

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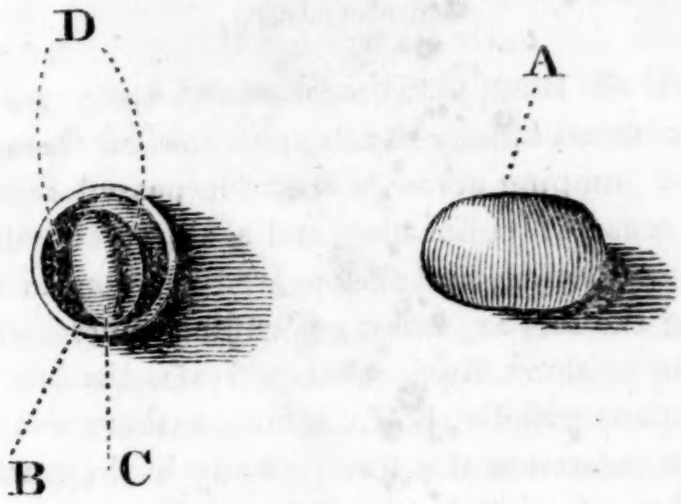
may be brought out at the mouth, provided the articles are of a certain size.



A. Represents the size and shape of the pebble.
B. The size of the internal cylinder of the trachea.
C. A transverse section of the pebble.
D. The space between the walls of the trachea and the circumference of the pebble, by which it will appear strange how so small a space permitted respiration.

Two cases of bronchotomy were noticed in the July number of the Medical Recorder which occurred in Dublin; one of which terminated unfavourably, as the author supposes, in consequence of the wound being choaked up from time to time by mucus, &c. Had the gentleman availed himself of the suggestion of Mr. Lawrence, and cut out a piece of the trachea so as to secure a permanent opening, the case would in all probability have terminated favourably. In all cases where it becomes necessary to keep the trachea open, this advice of Mr. Lawrence is of great importance, and should not be neglected.

ART. VII. *Cases of Bronchotomy.* By Dr. S. ANNAN, of Emmettsburg.

ON April 2d 1822, G. L. aged about six years, playing with some dried kidney beans, put one of them into his mouth, and jumping across a fence, it passed into the trachea. A sense of suffocation and a slight convulsion immediately succeeded, but disappeared so soon as the body had passed the larynx, leaving a trifling cough, which also subsided in a short time. When I saw the boy the next day in company with Dr. R. L. Annan, as there was no symptom of the existence of a foreign body in the trachea, with the exception of a slight catch or rattle in the breathing, only perceptible when asleep; it was thought advisable to defer the operation, which was considered the only chance of relief. On the morning of the 5th, a very great difficulty of breathing, threatening instant suffocation, with a violent cough, (the efforts attending which produced convulsions in all her limbs,) came on; during the paroxysms of coughing, which were very frequent, the face became livid, and it was necessary to have him held, to prevent him from being thrown out of bed. I proceeded without delay to perform the operation with the assistance of Drs. Robert L. Annan, Moore and Sharles, and extracted the bean without difficulty; the relief was instantaneous; the wound closed in the ordinary time.

August 22d, 1822. I was consulted by a young man, who when pitching hay, had a timothy head in his mouth, which passed into the trachea, the stem downwards, and the spicula turned upwards; this happened about a week before; there was but little cough, but from the pain and uneasiness which he complained of, in the trachea, at the upper part of the sternum, particularly when pressure was made, I thought it possible it might not have passed far into the bronchia, and perhaps might be extracted; the operation was performed

with the assistance of Dr. Robert L. Annan, and Dr. Moore, but all my efforts to remove it were ineffectual, it had become impacted in the bronchia, and was immoveable; the wound soon healed, inflammation came on, abscess after abscess formed and burst, about as low as the fifth rib; the foreign body retained its position, and the patient sunk under the discharge and irritation.

On March 25th, 1823, I was requested to visit a child four years of age, which had a persimmon seed in its trachea; the seed had been in four weeks, but not being easily affected by heat and moisture, it had not enlarged so much as to produce dyspnœa; the only troublesome symptom until a day or two before I saw it, was an occasional violent paroxysm of coughing, when the seed loosened from its bed in the bronchia, came up into the trachea, and touched the lower part of the larynx, which subsided, so soon as the child by its efforts to relieve itself, forced the seed into the bronchia again; at this time, however, there was considerable fever, which had existed for a day or two, under which the child was evidently sinking: the seed had not been up in the trachea for several days; but as I was apprehensive of the injury that might be done the lungs, by the constant irritation, which had produced already considerable inflammation, and that the child might sink under the irritative fever, I operated immediately, but with all the exertions the child could make, I could not succeed in forcing it up into the trachea; when I visited my patient next day, I was informed that the child had had one of the ordinary paroxysms of coughing, during my absence, showing its dislodgment. I opened the wound, and with but little trouble, had the satisfaction to see it forced out, accompanied by a large quantity of purulent looking matter; the child soon recovered. In all the cases the wounds healed kindly in a very short time; the two first patients experienced so little uneasiness, that they walked about in a day or two.

ART. VIII. *A second Case of Bronchotomy.* Reported by HORATIO G. JAMESON, M.D. of Baltimore.

I WAS requested in the second week of September, to visit Mrs. H. a lady of uncommon worth and vigorous mind, but of a very delicate constitution. She informed me that some time in February of the present year, she was affected with a severe sore throat, that it had yielded to medical treatment, and left her in the enjoyment of fine health from early in April till about ten weeks before my visit. The last attack induced her to come to town for medical aid. Active depleting measures were adopted, and she soon thought herself well enough to return home, but in a little time she found the disease returning rapidly. She came to town and put herself under the care of Drs. Chatard and Donaldson. Local bleeding by means of leeches and other active antiphlogistic measures were actively employed; these remedies for some time had a very beneficial effect, but gradually lost their influence, and she proportionally grew worse. Three weeks ago she was delivered of a child about a month too soon, and suffered much in her general health and strength from that period.

At this time she is suffering under a severe sore throat, with enlargement about the larynx and adjacent parts, also difficult breathing without wheezing or rattling in the throat or chest. The parts about the root of the tongue and epiglottis are much inflamed, and have a raw appearance, amounting nearly to a state of ulceration; the debility is very great, but there is neither night sweats, nor pains in the chest; the pulse is feeble and frequent; the thirst very moderate; the bowels regular; she sleeps little; the expectoration is moderate, and of a thin mucous consistence. But above all, she suffers from the pain and difficulty of swallowing; and there is rather more pain from taking fluids than solids. She swallowed a little water while I was present, and each tea-spoonful produced a state of extreme

suffering from violent cough and strangulation, in so much, that suffocation was apprehended.

I found this lady strongly prepossessed with the belief that her disease was local; that if the local affection could be arrested her general health would soon improve. Owing to this opinion she sent for me, hoping, that if I coincided with her in opinion, that some surgical operation might be performed which would enable her to regain her health. She urged me in the most earnest manner to reflect carefully upon her case, and if I could propose any operation with some prospect of advantage, she would willingly submit to any thing, however severe, which might restore her to the care of her children. As I could not feel myself at liberty to give an opinion, I proposed a consultation with the gentlemen in attendance.

In consultation I found both the gentlemen decidedly of the opinion, that our patient was far gone in phthisis trachealis, and as they had no longer any hopes of relieving her, they could not feel any particular objection to an operation, provided it did not subject the patient to much pain. It was then urged in favour of an operation—that it would not subject her to much pain, perhaps it would materially lessen her sufferings, although it should fail in arresting the fatal tendency of the disease, admitting the disease to be confirmed consumption. There was however a possibility at least of the disease being cynanche laryngæa; if so, the cases reported by Mr. Lawrence in the 6th vol. of the London Med. Transactions, afford a practical precedent highly interesting, and calculated to justify a trial of the operation which he employed. Even admitting the disease to be consumption, it does not result necessarily that the patient must die; however rare such instances may be, there are some well authenticated instances of recovery from this disease, and many more of persons having been predisposed to consumption, who by extraordinary care reached a good old age, after spending a life reasonably comfortable. It is true that in the *present* form of the disease, if it really be phthisis

trachealis, we are not to expect the regular symptoms of the last stage of consumption, but their absence in the present case had better be placed on the favourable side than on the opposite, since if the disease be really consumption the patient cannot be materially injured by an operation; but should it be a chronic state of cynanche laryngæa, she might sink without the suitable means being employed in her case: Farther, I added;

The upper part of the larynx, the epiglottis and the adjacent parts are highly inflamed, and every act of swallowing is highly painful and attended with risk of suffocation. No doubt the trachea was not only inflamed, but much swelled internally, as we see it is externally. By opening the trachea below the thyroid cartilage, suppose that we should lessen the risk of suffocation, by taking in the air below the parts most inflamed, we might promote the chance of removing the inflammation. Another important desideratum presented itself, which was to relieve the muscles of deglutition from action. This I would accomplish by a flexible tube in the œsophagus passed through the nose. These measures will enable the patient to keep her mouth at all times shut, and prevent the cool air from passing over a highly inflamed surface, and while she was relieved from the pain and peril of swallowing, we may expect much more effect from remedies applied for the purpose of removing the general inflammation and swelling of the throat.

The gentlemen in consultation having heard my views, did me the honour at once of putting the case upon this issue; that I should fairly explain my intentions to the patient, who being endowed with a strong and discerning mind, was capable of duly appreciating what might be said, and if the operation should meet her approbation, that they would willingly assist me in the undertaking. I accordingly explained my views to the patient, and put the affair upon this issue; that if she had really consumption she could not be saved by an operation; if the disease was local there would be some chance; that this was a matter of

uncertainty, and her own feelings were probably as good a guide to go by as any other; that she should take time and deliberate upon the affair; that a few days would probably not be material, &c. Having conferred with her friends, she concluded upon undergoing the operation the next day.

On the 18th of September, Drs. Donaldson and Chatard being present, I proceeded to the operation in the usual way; having passed my knife through the crico-thyroid membrane I cut downwards through the cricoid cartilage, and two or three rings of the trachea. Both the gentlemen present heard me cut through the cartilage, but no air escaped. I tried to pass in my finger, but could not succeed; I then cut upwards perhaps half an inch in the thyroid cartilage; still I could not pass in my finger, nor would a probe enter without considerable difficulty; I now passed in a knife handle, and by forcibly turning it round I opened the wound and passed a probe to the posterior part of the trachea, when a little air made its appearance. The common curved silver tube of Richter was passed in edgewise with some difficulty, and having reached the posterior part of the trachea it plunged in and the patient respired through it. It was now evident, that the trachea opposite the wound and above it had been converted into a solid body, having no opening except on the posterior part. This state of things could not be produced by simple swelling of the internal membrane, but by actual growth of the parts, and that growth having all the characteristics of a steatomatous tumour, as I ascertained afterwards. The operation was borne without a complaint, and immediately afterwards she expressed herself as having feelings of a new life being infused from the introduction of the tube. She coughed a good deal, however, from the irritation caused by the tube, and a little blood getting into the trachea. Owing to this disposition to cough which produced considerable pain from the tube, I thought best to postpone its introduction into the œsophagus. I returned in about two hours, and passed in the tube without much pain or difficulty; through this I injected about half

a pint of milk. The patient declared herself now comparatively comfortable, and said that for several weeks almost every meal she had taken, gave her more pain than the whole operation. A full anodyne was now given. In the evening found the patient tranquil and disposed to doze; some milk was then given her.

Sept. 19th. Slight fever; she says her condition upon the whole, is improved. I perceived that the mercury which she had been using in the form of solution, has taken effect, discoverable by the breath, and considerable ptyalism. Evening—has taken nourishment through the tube with the assistance of her sister very comfortably; pulse forbidding, being very irregular and feeble.

20th. Had a tolerable night, pulse calm and regular, somewhat incommoded in the night, and much so this morning, with phlegm in the throat. The phlegm lodges low down in the trachea, and she thinks is chiefly confined there, because she cannot stop the tube well, while she would hawk it up. Directed, tinct. opii, vin. antim. and spirit nitre in small doses, for the purpose of allaying the irritation. Evening—pulse rather unpleasantly frequent, but upon the whole she is much more comfortable, owing to the drops having greatly allayed the irritation of the trachea, &c. Takes nourishment comfortably.

21st. Circulation tranquil, had a pretty good night. In the night there was a most extraordinary change of weather, and the patient overlooked the necessity which existed for a fire in her room. In the course of the morning, the phlegm became tough and more abundant, attended with some soreness of the throat; in short it was evident that she had caught a severe cold, and I shall always entertain the belief that her chance of recovery was materially lessened on that unfortunate night. Evening—some fever, pulse upwards of 100, but not remarkably tense; breathes better since surrounded by a warmer atmosphere afforded by fire in her room. The febrifuge drops already mentioned have been used *pro re nata* with much advantage.

22d. Still feverish, had a bad night owing to the toughness of the phlegm; the tracheal tube clogged up with dried mucus; it was withdrawn and cleansed. Evening—more tranquil—pulse about 100—swallowed a little horehound candy without pain, by which she is convinced that her throat is much improved; digests her food well.

23d. Pulse about 100, but less tense than yesterday; had a good night; breathes well and coughs but little; her bowels have been opened occasionally by enemata. Evening—nothing remarkable, has spent a good day.

24th. Rested well last night; the cough had been pretty troublesome in the early part of the night, but the latter part comfortable; tube stopped; opened it with a piece of whalebone; pulse very frequent, but her spirits good. Evening—tracheal tube very much stopped, removed and cleaned; throat, particularly about the larynx, has lost much of its swelling; is satisfied that the upper part of her throat is less sore; mouth still slightly affected by the mercury. It ought to have been mentioned sooner, that two or three days after the operation, poultices of linseed meal were applied, and are still continued to the throat.

25th. Had a bad night, cough being very severe; pulse very feeble, patient desponding; cleaned the tracheal tube by taking it out; tried to pass a common catheter from the wound up through the larynx, but could not; but I was sensible that there was more space than at the time of the operation. Cough being violent, I directed the prussic acid, 10 drops in 4 ounces of water—dose, table spoonful—left off the poultice, and rubbed the throat and breast with an ointment made by mixing a few drops of the oil of savin in an ounce of common or simple ointment. Evening—cough greatly abated from the use of the acid; breathing difficult, owing to the stopping of the tube with phlegm.

25th. Rested well last night; cough much abated; debility very considerable and may be increased by the acid, which had been taken every four hours; directed it every six hours. Evening—has had a comfortable day, cough has been mo-

derate, but the debility is forbidding; advised the use of quassia ; breathes and expectorates easily. The swelling of the throat is much diminished, and the parts are much softer; she can swallow a little candy dissolved in water without pain.

27th. Had a good night; pulse upwards of 100; breathes well, but complains of extreme debility. Evening—pulse still somewhat excited, being frequent and tense; complains of a strange and very unpleasant feeling; there is no chill, no palpitation, but a sensation of horror. Breathes well, coughs but little. Fearing the prussic acid might have some agency in producing those unpleasant feelings, I advised a suspension of it during the night.—Still takes her food well, says her throat feels softer and easier, also that the larynx in passing up and down in the act of swallowing, gives no uneasiness.

28th. Had another good night, and feels nothing of that painful debility, which she experienced yesterday; pulse soft, more equable, and about 100; less phlegm; expectorates more easily. Evening—has not felt those sensations of horror to day ; but little cough or expectoration; tracheal tube well open, and there is a very marked improvement of the throat, but there seems to be too much disturbance of the circulation to admit of much hope of a successful issue.

29th. Pulse more tranquil, being equable, and about 90; rested well, coughed but little. Evening—complains of considerable difficulty of breathing; has thrown up much thick phlegm, or perhaps more properly, muco-purulent matter; has suffered from the tube being stopped; after cleaning it she was much relieved.

30th. Had a very bad night; coughed a good deal, was restless and unable to sleep but very little, and that little unrefreshing; pulse feeble and hurried; seems quite despondding, debility being again extreme. Has been using small doses of kinine for several days and with good effect, but it seems now to be losing its effect. She now experiences relief from the antimonial and opiate mixture. Breathing has been very difficult, and the tube is constantly choaked with phlegm. I

introduced a tube of much larger size than those in general use; this gave no pain, the internal swelling having much diminished; this afforded considerable relief. Evening—breathing free, but debility extreme; pulse feeble and very frequent; skin remarkably dry; has not coughed much; still she continues to take nourishment very well; advised table spoonful of best Madeira wine, about once in two hours. 9 o'clock at night,—I find her much more comfortable, breathes well, thinks she has been benefited by the wine.

Oct. 1st. Had a tolerable night; slept a good deal, but coughed pretty much; breathing good; pulse less frequent than yesterday; inclined to doze; weakness alarming; throat more sore than it has been since the operation. Evening—drowsiness is gone off; she is stronger and more cheerful; she drank some mineral water without pain; new tube affords much comfort; continue the kinine, with anodyne at night. Takes her nourishment.

2d. Rested pretty well last night, but complains of much debility; flushing of the cheek. Evening—pulse a little excited; ate a little soft cabbage, and swallowed it without any pain; still speaks anxiously of her debility, and is very desponding. Tongue foul and slight fever. I advised 8 grains of calomel, which operated moderately.

3d. Was restless greater part of the night; cough troublesome; phlegm tough, and debility too great to spit it up; pulse feeble and thready; skin moist; told me she was conscious that she was dying, having such feelings as no mortal could endure. Evening—took her nourishment, but without relish for it; spoke of feeling as though her thorax was violently squeezed together; cough not frequent, but very painful; asked for laudanum at night, hoping it would lessen her sufferings. There was extreme agitation of the arteries, and violent palpitation; but still she said she felt better than during most of the day. About half an hour after I left her, she expired in the act of coughing, in the full possession of her mental faculties.

The last two or three days of her life, she frequently

expressed a wish that she had availed herself of the operation at an earlier period of her disease; expressed much thankfulness for what had been done; acknowledged that she had consumption, but thought that it arose from the disease of her throat. From the length of time this lady lived, the rapid improvement of her throat, the great relief from the pain of swallowing, &c. I feel strongly inclined to advise bronchotomy, and supporting the patient through a tube, in recent cases of phthisis trachealis. This paper has already extended beyond my expected limits; but at some future period, I shall offer my views more at large, endeavour to show the advantage of laying all sphincter muscles out of use, when inflamed, and show that although the muscles of deglutition, though not to be viewed as sphincters collectively, that still their action being violent and involuntary, requires the same state of quiescence for their recovery from inflammation as muscles of that character.

Before closing this communication, I wish to lay before the medical public the following interesting information, which I have extracted from a letter I received a short time since from Dr. Culbertson, of Chambersburg, Pennsylvania, a gentleman highly distinguished for his surgical abilities.

"The subject of it (the case alluded to) was a coloured child, three years old, who, while at play with other children on a loft where there were beans, got one in its windpipe, as was conjectured from the circumstance of its being taken so immediately and suddenly ill with cough, great difficulty and distress in its respiration, &c. *though at the time he left home it appeared relieved, was walking about, and even eating some bread and butter.* It was concluded an operation was necessary. As I anticipated, in a very short time my immediate attendance was requested, *as the child had again been taken with very alarming symptoms.* Before I got out the child was dead. In order to ascertain certainly, whether there was any extraneous body in the

trachea or not, I made an incision into it below the cricoid cartilage, and there cut directly upon the bean, which was so swelled as to completely fill up the passage, and thereby totally obstruct respiration. I need hardly add, that there cannot be a question but that a timely operation in this case would have saved the life of the child. *Indeed if I had been upon the spot sooner, even though the child had been dead, I would immediately have performed the operation of bronchotomy, and then made use of every means usual in cases of suspended life, to resuscitate it.*" The doctor goes on to relate that, "I well recollect seeing in the newspapers, a few years since, an account of the operation of bronchotomy having been performed for the extraction of a bean; and in this case the bean had passed down as low as the bifurcation of the trachea, and was extracted by means of a long pair of wire forceps, with complete success. This case occurred in one of the western counties of this state."

ART. IX. *A Case of Femoral Aneurism, cured without the operation.* By W. BEACH, M.D. of New-York.

MRS. Eleanor Grant, aged 50, some time last winter experienced a debilitating and painful enlargement of the left leg, above the knee. A physician was sent for, who applied a blister, which, instead of affording relief, caused it to swell and rendered it extremely painful. The tumour from that time gradually increased for more than two months, when I was requested to see it. Upon examination I found the whole limb œdematous; about half-way from the groin to the ham over the femoral artery was a flat circumscribed tumour of an enormous size; which, though soft and compressible in the commencement, had now become hard and somewhat inelastic. Below the knee along the course of the artery there was but little circulation, which produced a continual sensation of numbness. Pulsations were both

seen and felt corresponding with those at the wrist. Their force would sometimes resist the severest pressure. From the distention of the integuments it appeared that the tumour would soon burst. The pain accompanying it was very excruciating. It was also attended with great prostration of strength and violent fever. The only respite experienced, she said, was from taking large quantities of laudanum, which in all had amounted to nearly two quarts. I was satisfactorily convinced that it was a well marked case of femoral aneurism, and that the subject of it was in a very dangerous condition. A consultation was held with an old experienced practitioner, who also pronounced it to be a femoral aneurism ; Dr. Mott was of the same opinion. The only chance of recovery, it was thought, was from amputation of the thigh ; the patient, however, would not submit to an operation. Accordingly, fearful of suppuration from the inflamed state of the tumour and surrounding parts, I applied the tourniquet, with orders to tighten it in case of such accident, and pursued a rigid antiphlogistic course of treatment, both general and local ; cataplasms, cooling lotions, and discutient ointments were now applied. I next cupped the tumour and extracted some blood from below the knee, in all about ten ounces.

The whole leg was repeatedly bathed in salt-water and covered with bruised stramonium leaves. Refrigerants were given internally. The pain and pulsations of the tumour now began to abate ; also the irritation, fever, and all other unfavourable symptoms. In about six weeks my patient was able to walk out, and soon after commenced her ordinary business. She now enjoys good health. I am confident that the aneurismal sac was filled with coagulated blood ; and that the circulation had stopped, being carried on subsequently by the anastomosing branches. An operation must unquestionably have proved fatal.

ART. X. *An Essay on the Autumnal Bilious Epidemic of the United States.* Read before the Medical Society of the District of Columbia, in April 1823. By DR. NATHANIEL P. CAUSIN, of Washington, D. C.

> But tread with cautious steps the dangerous ground,
> Beset with faithless precipices round.
> Truth be your guide, disdain Ambition's call,
> And if you fall with truth, you nobly fall.

IN approaching the abstruse and mysterious subject of our inquiry, it must be apparent that much reading, reflection, and experimental knowledge, are indispensably necessary to its proper investigation; indeed, far more than many can, even at this day, boast of; still such is the importance and magnitude of it to the good people of these United States, that an ample apology may be had therein, for any attempt, however feeble, to add one solitary ray of information. With grief and pain to the human family, with deep humiliation; nay, I had like to have said, opprobrium, to the medical profession, do we annually witness the return and increased ravages of this most abominable curse of curses. I now appeal to the intelligence, liberality, and patriotism of the medical profession. Shall we ingloriously and cowardly, yield without an effort, the citadel to the foe? or shall we, in folly and apathy, fold our arms and exclaim, we will not subscribe to the maxim of some of the most learned of the profession—that nature has furnished an antidote wherever she has planted a bane. Doctor Walker has elegantly remarked, "That if nature has given us, in our swamps and marshes, a Pandora's box, she has in our forests, given us a cornucopia: has she in our vallies sowed the seed of disease? she has on our hills planted the cornus florida; or has she, more grievously to us, given wing to the volatile miasmata, that under protean forms, attacks us in a thousand ways? she has most providently

scattered in our swamps, the cornus sericea." But I would not be understood to overvalue these provident gifts of nature, by employing specifics. The moral to be drawn from this, is, that all disease is more or less within the control of the healing art, on liberal and philosophic principles, and not, as some would contend, by adopting the empirical, contracted practice of specifics.

Nature, throughout all her operations, has been wise and bountiful; she advances with wisdom in the one hand, and steadiness and firmness in the other, not to be coerced or cajoled; and for her government, has adopted rules, at least as immutable, as those of the Medes and Persians. Against her decrees, no talismanic influence can prevail, nor can she be arrested in her career by superstitious bigotry.

It is only then by taking a liberal and enlarged view of this stupendous and beautiful system of nature, that we can hope to arrive at any degree of perfection in our attempts to correct any of her incidental aberrations: I say incidental, because so long as she be left undisturbed, in the annual and diurnal distribution of her labour, nothing but harmony and health exists in every part; but so soon as this beautiful system be violated, anarchy, disease and death, are the inevitable consequences; it is this violation alone, which demands the aid of our scientific profession, and if we be not prepared, by laborious investigation, strong powers of discrimination, and enlarged views of the various operations of natural cause and effect, to stay those inroads and heal these consequent breaches, better far, for suffering humanity, that we did not professionally exist. It may in truth be said, that at this time to attempt any rationale of the remote cause of fever, with a view to the introduction of any thing new or profitable, is vanity in the extreme, because the ground on which we must necessarily attempt to erect our inquisitorial superstructure, may be truly called consecrated; it has been either directly or indirectly occupied, by the most learned of the human family, from the days of the venerated Hippocrates, in every age and every

clime, where science has dared erect its standard: still so long as the imperfection of human nature be admitted, and the researches on this subject more especially acknowledged to be far short of satisfactory demonstration, there is a strong inducement for us to pursue, with untiring step, the beaten track of our ancestors, with a hope, at least, of gleaning something, that may lessen the pains and privations of suffering man.

In pursuing this subject, I wish it to be distinctly understood, that it is by no means necessary, nor do I intend to throw the slightest doubt over the consoling creed of the immortality of the soul.

My reason for making this remark is, that subsequently I shall be compelled to touch on the vital principle of the animal economy, as a mean by which our subject may be more fully elucidated; and I shall the rather attempt this, because I think the doctrine touching this principle as taught in the medical schools, by no means discordant or irreconcileable with the doctrine of the immortality of the soul. In order to prosecute our investigation systematically, it becomes necessary to review the systems which have been taught in the different schools, from the days of ancient Greece and Rome. We learn from history, that when, after many ages of darkness and barbarism, the literature of the ancients had been almost destroyed, learning was again restored in the fifteenth century; so from causes well known, the system of Galen was alone taught in those days; however, in the sixteenth century, Paracelsus laid the foundation of the chemical system, which was in direct opposition to that of Galen, and by the success of remedies under this plan, it soon had many advocates. Though he and Galen taught adverse principles; still so far as they reasoned on the principles of pathology, they were both humoralists.

About the middle of the seventeenth century, when the circulation of the blood, together with the receptacle of the chyle and the thoracic duct were discovered and admitted,

the Galenic doctrine was exploded. We are also taught that about this period, Galileo introduced mathematical reasoning, and Lord Bacon proposed the method of induction, thereby exciting a disposition to observe facts and make experiments; these new modes of philosophising, necessarily had some influence on the state of medicine; a knowledge of the circulation, and the application of mechanical philosophy, led to the consideration of the organic system, and the explanation of the phenomena of the animal economy. Still there was yet much to attain before the science of medicine could assume any thing like systematic perfection; the peculiar condition of the fluids solved all difficulty as to the cause of disease, and explained all mysteries in relation to the operation of medicines. It was now thought that chemistry promised a better explanation than the Galenic or Aristotelian philosophy had done; and therefore chemical reasoning was generally received. Lord Bacon became the advocate of chemistry, whilst the corpuscularian philosophy, restored by Gassendi, united with the reasoning of the chemists, and the Cartesian readily joined with both: hence, we find a humoral, but chiefly a chemical pathology prevailing. About the beginning of the seventeenth century, there were presented to us, three new and different systems of physic: the first was that of Dr. Stahl, which for a long time prevailed in Germany; the leading principle of this system was, that the rational soul of man, like a faithful centinel, watches over, protects and governs the whole economy of his body; this doctrine gave rise to or sanctioned the vis conservatrix et medicatrix naturæ, and as ridiculous as this may now appear, the principle has been advocated by many of the most distinguished philosophers of Europe, viz. Perrault in France, Nichols and Mead in England, Porterfield and Simpson in Scotland, and Gaubius in Holland. This idea, however, was not original with Stahl; it is to be found in the Timæus of Plato, and has been subsequently received by Helmont, Wepfer, and Dolæus. It must at once be observed that the admission of this prin-

ciple to the Stahlian extent, must be fatal to any system of medicine, however perfect independently of it. Dr. Cullen remarks, in relation to it, that this so much vaunted Hippocratic method of cure has had a very baneful influence on the practice of physic, and Dr. Huxham has observed, that even in the hands of Sydenham, it did much mischief. The opposition to chemical medicines in the sixteenth and seventeenth centuries, and the noted condemnation of antimony by the Medical Faculty of Paris, are to be chiefly attributed to this unphilosophical principle. "Dr. Hoffman has manfully combatted this error in his Commentaries de Differentia, inter Hoffmanni doctrinam medico—Mechanicam et G. C. Stahlii Medico-Organicam; and both Boerhaave and Haller, have wisely and successfully resisted its paralysing influence."

We are now brought to the days of the celebrated Boerhaave, whose genius and erudition have been rarely excelled; still we find that he, even with the advantage of the researches of his predecessors from the days of Galen, has established and taught a system far short of perfection, though confessedly superior to any that had preceded him. This however continued to be received and taught with much popularity, till assailed by Cullen in the University of Edinburgh, who, by modifying and pruning from it what he supposed its most exceptionable feature, the humoral pathology, erected on its ruin a new one, which for a time almost immortalized his name; but as he might have anticipated, from the regularly progressive state of the arts and sciences, its popularity did not long continue; indeed long before he had withdrawn from the chair, the brunonian doctrine began to occupy the attention of the world.

It has been generally admitted that contagion, miasmata, cold, and fear, are the principal remote causes of fever: in our present investigation, miasmata demands our principal attention.

Chemistry has demonstrated many and important properties of the blood, by means of the decomposition of atmos-

pheric air in the lungs : Innumerable experiments have been performed by the most intelligent physiologists from the days of the immortal Harvey, which, in connexion with corroborative proof from sacred history, strongly confirm the doctrine of its vitality. Dr. Cullen with philosophical truth remarks; medicamentum non agit in cadaver,—the true meaning of which is, that the operation of medicines does not depend on the laws of matter and motion, which take place in inanimate bodies, but on a principle which exists in living animals only. We therefore inquire what is this vital principle ; he further remarks, it must be connected with the primary and fundamental functions of the animal œconomy; many think, says he, that the circulation of the blood may be considered as the vital principle upon which all the other functions depend : He then proceeds with a train of elegant though fanciful reasoning, till he ultimately becomes perfectly satisfied, that this all important principle is seated in the sensorium commune; hence so essentially necessary to the existence of life in the organization of animals, it is to be found located in the solids. With due deference to the opinions and reasoning of this truly distinguished author, I cannot avoid remarking, that as easy would it be to prove, that fire is inherently a component part of wood, because the latter is a combustible substance, and during its combustion, heat and light are elicited. I wish it to be distinctly understood that the principle we are now in pursuit of, is entirely separate and distinct from the rational and immortal soul of man, which alone elevates him above the brute, and of which he is so justly proud, although we never have known nor never can know any thing of it, except through the medium of divine revelation. But the principle which at present presents itself as so immediately connected with life, is one which pervades the whole universe. It is found vivifying the vegetable as well as the animal kingdoms, and is so inseparably connected with the science of medicine, that it cannot be lost sight of by those who profess to treat disease philo-

sophically. Though for a long time physiologists have by one consent readily agreed that the circulation of the blood receives its first impulse from the heart, still the moment it is received by the arteries, they acknowledge themselves confounded, and a thousand conflicting and irrational theories are suggested, as to the continuation of this action.

In the foregoing remarks I have endeavoured to establish the three following propositions:

1st. That the vital principle, acknowledged by all to exist in the animal economy, has its residence more especially in the blood. 2dly. That the decomposition of atmospheric air in the lungs, is essential to the existence of life, and that the blood receives from the air some property, which enables it to continue its circulation through the system. 3dly. And that the principal remote cause, of the disease now under consideration, is miasmata, introduced into the system in a state of chemical or artificial mixture or combination with the atmospheric air.

These three propositions being established, we shall naturally look to the sanguiferous system for the first assault made on the vital principle; and we must assuredly infer, that it induces disease in all its protean forms, by robbing the blood of some essential property, which it is wont to receive from the atmospheric air, and thereby enfeebling its powers of vitality. May not this property so necessary to vitality be oxygen, as has been suggested, and if so, may not too high a degree of carbonization exist, in consequence of the undue abstraction of it? If this be true all important practical deductions may be drawn from it. I am willing to confess that there seems to be but little difficulty in subscribing to the correctness of this theory of the modus operandi of miasmata; the congestive state of fever, in my opinion, is a strong argument in favor of it; in this type of fever, there is always a deficiency of oxygen in the blood. Some contend that is an effect, rather than a cause, but the reverse is the most rational, and only philosophical conclusion; that property of the blood so conspicuously necessary to sustain

the contractile effort of the heart and arteries, viz. its vitality, is by the vitiated state of the atmosphere enfeebled, and the smaller vessels, consequently, become comparatively torpid, and of course congested; this seems to be the correct mode of reasoning on the subject, and if so, it speaks strongly in favour of the theory first suggested.

It is certainly true, that no eudiometrical experiments, within my knowledge, have been able to detect any important change in the component parts of the atmosphere; the result of those experiments has been nearly the same, whether the air be obtained at Montpelier or the lowest grounds bordering on the Mediterranean: hence, it would appear, a priori, that this chemical change of the blood, through the medium of the atmosphere is chimerical, and that the theory being unsustained by facts, must necessarily be deserted; this, however, is not true, for other chemical tests by affinity, have frequently detected the existence of carbonic acid gas, hydrogene, &c. in considerable quantities, in the atmosphere of marshes; we can therefore only reconcile this apparent inconsistency, by supposing the failure to detect any change in the proportions of the atmosphere by means of the eudiometer, to arise from the imperfect state of science, or rather the imperfection of the experiment; for that carbonic acid gas does enter largely into the composition of marsh atmosphere, has been incontestibly proven: The exposure of lime-water to its action, has resulted in the deposition of the carbonate of lime; this fact of itself is a host, opposed to the numerous negations adduced by the advocates of eudiometrical experiments; there can be no doubt, that under the most unfavourable circumstances, the atmosphere in the neighbourhood of marshes, &c. during the day, becomes very much corrected, and nearly restored to its healthy state of due proportions, by ventilation and the action of the sun on the surrounding water and vegetation; by this operation, an additional quantity of oxygen is elicited, and the other ingredients so deleterious to animal life, are absorbed by the adjacent water and vegetables; in this process, we have

a striking exemplification of the beauty and apparent intelligence of the operation of natural cause and effect; this fact being established, we can readily conceive that persons most exposed to the night air of autumn, cæteris paribus, are most likely to be attacked by fever, and it furnishes an admonition, which, if not disregarded, may save thousands from sickness and death. It is deemed unnecessary to make any farther remarks in support of our theory, believing that enough has already been said to satisfy every unprejudiced mind, of its plausibility; and being well satisfied that it may be at all times defended at every point, without violating in the slightest degree, any cardinal principle of philosophy; I will now proceed to make some practical remarks on the disease in question.

The bilious fever, commonly so called, is in truth one of protean form; we daily witness it, presented in a thousand different modifications, from the mildest intermittent to the most aggravated type of malignant yellow fever; no matter whether it be found lurking within the devoted precincts of New-York or Pensacola, New-Orleans or Philadelphia; no matter in what latitude, whether it be within or without the tropics; no matter in what livery it may appear, we believe that under equal circumstances it is the same, that is, that the same is the remote cause of all the different modifications of the disease; for the same cause producing under modified circumstances, modified effects, must, under equal circumstances, produce similar effects; the converse would be illogical and unnatural.

It may be objected to this doctrine of unity, that a few erratic cases of the milder form of intermittent are superinduced after frost, and during winter; this, a priori, to some may appear plausible, but to the inquiring mind it rather favours its truth; these cases are produced by the continuance of the same cause, but in a milder form than summer and autumn, viz. a vitiated state of atmospheric air, by local causes, such as damp confined cellars, &c. There are also some cases contracted during autumn, and from misma-

nagement, or some other cause, continued after frost, and indeed through the winter solstice; but the sceptic cannot avail himself of an argument from this, because to do so, he must reverse the order of things, and reason from effects rather than causes, or to be more intelligible, begin from deductions rather than premises. From the view already taken of the incipient stage of this disease, it is scarcely necessary to remark, that the lancet cannot be resorted to as an indiscriminate and curative remedy, for thus used, though it may cut short the disease, the sufferings of the patient, nine times in ten, will terminate only in death; but when we find excessive arterial action, accompanied as it generally is, by a hot dry surface, more especially, when we discover an important organ seriously threatened, then the lancet is strongly, nay, indispensably indicated as an auxiliary remedy; but when we find a different train of symptoms, viz. a small congested state of the arteries, or a copious secretion of the surface, with a soft compressible pulse, a cool or even temperate state of the skin, then to draw blood in quantity, to make an impression on the general system, we shall too often find to be an error which no means, within our control, can correct.

The most conspicuous remediate indications are, emetics and cathartics, and they are to be mainly relied on; I would therefore, as speedily as possible, dislodge from the stomach and bowels, all irritating matter, whether of food or secretion; in fever it is generally admitted that the digestive process is in great measure suspended, therefore it is folly to permit any sustenance to remain in the system, with a view to its nutriment, at a time too, when there is no need of it, even if it could be effected, and also when it is evident that these substances are actively employed, as irritants, in aggravating the disease; it has been suggested, and no doubt correctly too, that in this character of fever the chylopoietic viscera more especially suffer by torpor and consequent congestion; in emetics and cathartics we find a convenient and rational remedy for this evil, in their operation on the sys-

tem generally; they excite those organs into action, and prepare for the accession of fever in the night: it may be remarked by some, that the repetition of emetics is dangerous, lest thereby a chronic irritability of the stomach be induced; from long experience I know this fear to be groundless; so long as emetics are indicated, it is perfectly safe and rational to repeat them, unless contra-indicated by excessive debility or gastritis.

After having persevered in those remedies as long as prudence will authorise, without having arrested the disease, another class of remedies readily suggests itself, from which much benefit may be derived, if judiciously applied, viz. a combination of alterative and diaphoretic medicines; antimony and submuriate of mercury, administered judiciously, in small portions and at long intervals, seldom fail to lessen the force of diseased action; and indeed whenever the glandular system becomes excited by it, the disease almost always yields; I know not a single exception to the rule, where the system has been properly prepared for its exhibition; but this, like all other remedies, is sometimes abused by misapplication, and hence, for a time, this valuable remedy has occasionally lost reputation; but in the hands of experience and judgment it will never fail to reward, as well the physician for his labour, as the patient for his temporary suffering.

We are now brought to another important auxiliary, indicated in this disease, I mean epispastics; this remedy, when properly used, produces happy results, indeed frequently beyond the most sanguine anticipations; but when resorted to indiscriminately, and too early in the disease, it does incalculable mischief; it is only indicated as a counter irritant, when the disease locates itself at some one particular point of the system, or in that stage of it when the first manifestation of a recession of the vital principle from the extremities and capillary vessels is exhibited.

In the course of treatment, many other incidental remedies will readily present themselves to the mind of an ex-

perienced and skilful practitioner, such as tepid or warm bath, cold affusion, the application of oil to the surface, and sponging it with hot brandy, &c. After the fever has been subdued, then with a view to the restoration of harmony and the increase of the vitality of the system, we may resort to tonics and astringents, a number of which may be found in the mineral as well as the vegetable kingdom; the most conspicuous of which are, cinchona, the different preparations of iron, the sulphuric, nitric, and muriatic acids, &c. It will be remarked that the foregoing practical hints are applicable to general principles, the subject itself being diffused and comprehensive, would not admit of detailed practical remarks; this must be left to the discriminating mind of the practitioner, who must be prepared, from general reading and experience, to make the proper application to the various stages and type of the disease; to enter minutely into a detailed practice of every form of the disease, would be exceeding the limits of this paper.

ART. XI. *Observations on the Modifications and Treatment of Marasmus.* By a PHYSICIAN to a Public Dispensary.

THOUGH the diseases of children appear to have occupied the attention of late medical writers more than formerly, and though they are generally, doubtless, better acquainted with them, yet too many instances of inefficient or injurious practice must occur to every physician to render fresh dissertations useless. Neither altogether are these to be blamed if they contain nothing absolutely new nor unknown before; for amidst the great mass of medical works that issue from the press, a few only can meet the eye of each individual, and it may happen that those which evade his attention may have a powerful claim upon it, from their practical utility. With this impression on my mind, it has not appeared entirely without its use to make some observations upon that

disease of children which has been variously named marasmus, verminatio, febris infantum remittens, &c. Some doubt, perhaps, may exist, whether the latter disease be the same with the two former; but whoever will consider the histories of the infantile remittent of children can scarcely fail to perceive its coincidence with the disorder to which Dr. Hamilton and Dr. Ayre have given the name of marasmus.

The symptoms of marasmus differ in some way according to the age of the child. In young infants, it will often chiefly show itself by dulness and great unwillingness to be tossed about. From being manageable and crying little, the patient is perpetually whining, and it is impossible to engage its attention for more than a few minutes. The face becomes pallid and leucophlegmatic, occasionally, however, lighted up with a hectic flush. The feet and hands burn, and even if the child sleeps, it is restless, tossing about in the bed and moaning frequently. The appetite varies, being sometimes even voracious, and at another loathing every kind of food. The bowels are irregular, and the dejections unnatural, sometimes greenish and what the nurses call griped; at another, when there is nothing improper in the colour of the fæces at first sight, minuter examination shows it to be covered with a semi-pellucid jelly-like matter, apparently being merely the effects of an increased secretion from the internal surface of the bowels; occasionally the fæces are very black, but this occurs more frequently after opening medicine than at any other time, and it may perhaps be in some measure attributed to the remedy. Whatever may be the appearance of the fæces, they are always exceedingly offensive. The bowels are not always much enlarged nor hard; and indeed, frequently it would be impossible to perceive any difference in the feeling and appearance of the abdomen from its state in perfect health. As this disease often occurs during the time of dentition, it has not unfrequently been attributed to this cause, and it is undoubtedly not seldom aggravated by it; but, upon the whole, I am much more in-

clined to refer the severity of the symptoms which attend dentition to the previous bad state of the health than the reverse. The wasting of the muscular flesh is not so marked in very young children as in those of more advanced age, to whom the description of Dr. Hamilton more particularly applies.

In children of four or five years of age, besides the above symptoms, it is not unusual to observe a palsy of the lower extremities supervene, when the disease has continued a considerable time, while no derangement can be observed in the course of the spine. In the earlier stages of the disease, however, older children have more distinctly the symptoms referrible to worms, such as cough, sometimes merely dry and hacking; at others, occurring in severe paroxysms, and attended with expectoration, itching of the nose, and of the fundament, dry and scaly, sometimes swelled lips, and protuberant and hard abdomen. If the disease takes place in children who are just beginning to walk, they are frequently taken off their legs, and even those who may have walked firmly for a month or two, will totter and require to be carried. It would appear that the earth of bone is often not sufficiently deposited, for it is during this state that I have seen the bones of the legs most frequently curved.

The general cause of this disorder has undoubtedly its place in the primæ viæ, through which, perhaps, the secretions of the liver may, as Dr. Ayre inculcates, become vitiated, together with the other glands which contribute to perfect digestion.

The treatment of this disease has varied very much; by Dr. Hamilton purgatives almost entirely have been employed and recommended. Dr. Ayre gives minute doses of calomel, and, as he states, with the greatest success. Those who have been brought up in Mr. Abernethy's school confine themselves to hydrargyrum c. creta and jalap and calomel, while the old nurses, to whom in this country most of such cases are confided, give rhubarb in different forms. It seems impossible that these plans could have been pursued or re-

commended if success had not attended them; and it appears to me chiefly necessary to point out the different states of the disorder to which the various remedies are applicable.

In the very early stages of this disorder, a brisk purgative, or a repetition of purgatives, every other day will frequently remove it; but when we speak of the early stages of this or any other disorder, it must be referred rather to the order of symptoms than to time: for it will often happen, that the progress of the complaint will be very various in equal spaces of time in different patients. In one it will long be merely observable in a want of animation and general sluggishness, while the alvine evacuations are offensive and improperly formed. In another case, and no longer time, it shall be accompanied with cough, considerable emaciation, large protuberant and hard abdomen, and great debility. The enlarged abdomen, however, does not seem peculiar to the latter stages of marasmus, in which it is frequently wanting, until effusion or organic disease of the mesenteric glands has taken place. But in this case, the tumour is either soft and giving a sense of fluctuation to the touch, or irregular and tuberculated—two states which cannot possibly be mistaken for that kind of tumour which arises from constipated bowels. When from investigation, we find reason to believe that the enlarged abdomen is accompanying the early stages of the disease, and before there is any threatening either of hydrocephalus or organic disorder of the abdominal cavity itself, we may also promise a speedy removal of the symptoms by the use of purgatives. In prescribing these remedies for children, it is essential to bear in mind that they will usually bear and require proportionably larger doses than older people, and that the first dose or two must be stronger than what will afterwards be necessary. From the nature of the discharges after purgatives, it seems probable that this arises from the bowels being lined by more mucus than natural, and thus preventing the action of the medicine upon their internal tunic.

Case 1st.—June, 1818. William Langford, ætatis six, the

only surviving child of a large family, who by report had died of marasmus; affected with headach, slight hacking cough, dullness, frequent hectic flushes, and great restlessness; pallid countenance; had fallen away within the last fortnight; abdomen protuberant; bowels costive; pulse weak. Purgatives, with jalap and calomel, six grains of the former to two of the latter, repeated on alternate days for a fortnight, restored this patient to health; but it has been necessary to repeat them from time to time, as symptoms have recurred. I saw him about a year ago, when he was strong and healthy.

Case 2d.—October, 1822. Joseph Smith, ætatis eleven; symptoms of marasmus, combined with an eruption of porrigo on the face; tongue furred with elevated red papillæ; pulse feeble and quick; bowels protuberant, hard, and generally costive. The mother had in this instance given calomel and jalap *occasionally*, but without much relief. Purging with jalap, gr. iv.—pulv. scamm. gr. iv.—hydrarg. submur. gr. ii.—continued on alternate days for six weeks, restored the health of this patient, and removed the porriginous affection. The matter removed from the bowels in the early part of the disease was slimy, green, and extremely offensive; and for the first fortnight nothing like natural fæces passed.

Case 3d.—October, 1822. Bromfield Kerry, ætatis nine; general symptoms of marasmus; large abdomen; bowels alternately costive and relaxed; appearance strumous; had been poorly for six weeks. Purgatives removed much offensive matter, and he was dismissed cured in the course of a month.

In these cases the disease had been but of short duration; and there seems little doubt, but that the first case would quickly have terminated fatally, as the former instances had done, if it had not been arrested in its early stages. The second case shows the combination of marasmus with porrigo; and I may strictly say, that I have never known a single example of this eruption without affection of the general

health; and, indeed, the directions which Dr. Bateman has given for the treatment of the disorder seem to prove that he had a similar opinion. Still, however, though not in the case before us, local applications are, for the most part, necessary, in addition to the general treatment.

There are, perhaps, very few instances of marasmus in which it is not advisable to commence the treatment with the exhibition of purgatives, though it may not always be safe to rely upon them solely for a cure. And here great caution is necessary not to be deceived by the report of the parents with regard to the bowels: it is no unusual thing to be told that the child is extremely relaxed, and that the bowels are moved seven or eight times in the course of twenty-four hours, when stricter inquiry shows, that though the child makes frequent attempts, little or nothing passes away. Here it can scarcely be necessary to observe, that purgatives must be absolutely required; and, indeed, no other means can be advantageously employed till the bowels have been cleared out. Even, however, where diarrhœa really exists, much matter will still remain upon the bowels; and though the more powerful purgatives, as calomel and scammony, might be injurious, it is quite essential to give something which may effectually dislodge the offending matter. When this lies, as it generally does, in the lower part of the alimentary canal, glysters, with oil of turpentine, will be a powerful assistance, and will most completely destroy any ascarides which may be present, and which so usually accompany the disorder. As an aperient medicine, under such circumstances, nothing can be found more beneficial than castor oil; and disagreeable as this drug is to most adult persons, it is not often refused by young children. When diarrhœa attends marasmus, the dejections will for a long period consist of nothing but a dark-coloured slimy and offensive matter; and if occasionally a more natural evacuation should appear, it is quickly superseded by these diseased secretions. After the exhibition of castor oil, a great quantity of small black pellets, resembling sheep dung, are usually

expelled, and it will require frequent repetition before they entirely disappear. Sometimes when this is effected the disease vanishes, but much more frequently considerable derangement of the animal functions continues; the cough, bad appetite, furred tongue, and restlessness remain, and demand additional treatment. If, under these circumstances, purgatives be persisted in, the disorder is only increased, the debility and emaciation are augmented, and death speedily closes the scene.

When diarrhœa continues, the hydrargyrum c. creta, with two or three grains of rhubarb, twice a day, is a very useful medicine; and I have found, the diarrhœa being previously stopped, the infusions of camomile and rhubarb, given in such proportion as to ensure a tonic effect, particularly serviceable, with one or two grains of calomel, at first every day, and afterwards only every other day.

Case 4th.—November, 1822. Mary Ann Parkes, ætatis ten, for three years had been observed at times to be poorly, varying very much, with general bad appetite and great restlessness at night; she had lost much flesh, but more especially within the last few weeks; countenance pale; abdomen little, if at all prominent; tongue furred; pulse weak; bowels alternately costive and relaxed. Purgatives removed a great quantity of green slimy matter, but without any corresponding relief to her general state.

℞ Hydrarg. Submur. gr. ii.
2ndâ quâque nocte sumenda.

℞ Infusûs Rhei, Infusûs Anthemidis, āā ʒiv.
pro haustu ter die sumendo.

Under this treatment she quickly regained a good state of health, and was dismissed cured at the end of a month.

This case is an evident proof that much general weakness may remain after the original cause of the disorder has been removed, and that a tonic treatment will be necessary to ensure a complete restoration to health. With regard to the choice of medicines, I cannot, I trust, be misunderstood as to recommend those only which I have been accustomed to

prescribe myself, but merely to indicate the principle upon which the curative plan is generally to be conducted. How far Dr. Ayre's mode of giving small doses of calomel alone may succeed, I am unable to say, as I have never found it necessary to recur to it.

There is still another modification of marasmus, which is attended by worms, and more particularly the lumbrici. When Dr. Bateman changed the term verminatio in his reports to that of marasmus, because the symptoms which indicated the presence of worms were not peculiar to them, he announced a fact of very great importance in a pathological point of view. But it is to be regretted that he did not go farther; for there seems to me little question, not only that the symptoms are not peculiar to worms, but that these may be completely removed without the removal of the diseased state. The truth is, that worms are never generated in a healthy state of the body, and that they ought themselves to be considered rather among a series of symptoms of a peculiar disorder, than as the essential and sole cause. And this view of the subject is highly important as it regards practice; for if, when no more worms are expelled, we consider every thing done, or if we persist in treating for the worms because the symptoms which are supposed to indicate them have not disappeared, we shall probably equally fail in our purpose. Undoubtedly, as foreign and irritating bodies, it is most necessary to remove these parasites, but it is not less necessary afterwards to correct that state of the system in which they were originally generated. This opinion of the nature of the disease in which worms are found is not, I believe, original, though it seems but rarely adverted to, and I have seen somewhere (though I cannot now recover it) a paper in which mercury was persevered in with success, upon this principle.

Case 5th.—April 8, 1822. William Haurey, ætatis five; affected with symptoms of marasmus, cough, itching of the nose and anus, protuberant abdomen, &c.; often passes large pieces of tape-worm.

℞ Hydrargyri Submur. gr. iv.
Pulv. Jalapæ, gr. v.
pro pulvere 2ndâ quâque nocte sumendo.

℞ Olei Terebinth. ℥iss.
Gum. Acac. q. s.
Aq. Puræ, ℥viss.
optimè tere et misce ; sumat coch. ii. larga 2ndo quoque mane.

He continued this plan till the 26th, having passed several yards of the worm at first, but none for the last week. The dejections were slimy, dark-coloured, and offensive, mixed with a considerable quantity of a substance resembling the white of egg. For the last two days, the fæces have been more natural in appearance.

℞ Infusûs Anthemidis, Infusûs Rhei, āā ℥iv.
Potassæ Subcarbon. gr. v.
pro haustu ter die sumendo.

He continued this for a fortnight or three weeks, and was dismissed cured. I have heard of him within the last three months, and he continued well. I ought to have observed, that he remained very poorly and weak after there seemed reason to believe that all the worms were expelled.

With respect to the morbid anatomy of marasmus, very little information is to be acquired, since it seldom proves fatal while in its simple form. The most usual organic derangement appears in the mesenteric glands, which are often enlarged and scirrhous, more or less, broken down, and in every way having the appearance of scrofulous tubercles. On one occasion, in which an opportunity was afforded of examining a patient of four years old, no disease whatever of the abdomen was discovered, except, perhaps, a very contracted state of the sigmoid flexure of the colon. The pericardium was firmly united to the heart in every part, but there had been, I understood, no symptoms of disease of that organ during life. The symptoms which distinguish marasmus are not unfrequently also the precursors of hydrocephalus ; and if this disease ensues, of course the chief disease will be found in the head, though, as is well known,

the abdominal viscera are also frequently found to have undergone some change.

In the above observations on marasmus, I have not had it in contemplation to give any thing like a complete essay upon the complaint, but merely to point out some of those circumstances which I have found useful in a considerable experience of it. I might easily have extended the paper by a greater enumeration of cases, but it appeared to me fully sufficient to give such instances as would illustrate the points I had in view: if what has been stated be correct, one case will be sufficient to exemplify it; if incorrect, a hundred cases could not make it true.*

* London Medical Repository, August, 1823.

REVIEWS.

Quidquid venerit obvium, loquamur
Morosa sine cogitatione.
MARTIAL.

Art. XII. *Dublin Hospital Reports and Communications, &c. Vol.* III.*

(From the Medico-Chirurgical Review for September, 1823.—*Continued from* p. 763 *of the last Vol. of the* Medical Recorder.)

Our readers are aware that we concluded our first analytical article of this volume with Dr. Colles's observations on the danger of dissection. We now proceed to analyze the remaining papers in the order of their standing in the work before us.

1.—*On the Application of Leeches to Internal Surfaces.* By Philip Crampton, M.D. F.R.S.

It is generally admitted, as Dr. Crampton observes, that local blood-letting and counter-irritation are among the most powerful means which art supplies for the relief of local inflammation. It is reasonable to infer that the blood should be taken as directly as possible from the tissue which is the immediate seat of the inflammation, and that the counter-irritation should be excited in a tissue different and remote from the seat of the morbid action. Yet this principle does not seem to have been very distinctly stated or rigorously acted on by systematic writers. "The application of leeches to the skin of the eye-lids, and of blisters

* It will be recollected that the originals of three papers from the Dublin Hospital Reports, were published in our last volume, p. 490. To preserve the order and regularity of the series, the remarks of the reviewer on these papers are given in this article.

The reviews of O'Brien and Cheyne which will complete the series, will be given in our next.—Ed.

to the temples for the relief of ophthalmia, (says our author) is clearly a violation of it, both in respect to the bleeding and the blistering; since the blood is not drawn *directly* from the tissue which is the seat of the inflammation, and the blister is applied so near to it, that the irritation which it excites, not unfrequently extends to the diseased part, where it acts as a *direct* instead of a *counter-irritant*."

Having in many instances, observed what little impression is made upon the inflamed and turgid vessels of the conjunctiva by the application of leeches, even in great numbers, to the eye-lids or temples, and that when applied to the eye-lids in particular, they frequently excited erysipelatous affection, our author was led to try the effect of applying a single leech to the inflamed conjunctiva itself, where it covers (lines) the lower eye-lid. The result exceeded his most sanguine expectation, as a chronic inflammation of the eye which had subsisted for many weeks, was immediately relieved, and by a second application, was in two or three days completely removed. This success led him to extend the practice to every case of inflammation of the conjunctiva, and he can now, with confidence, recommend this practice as affording the most powerful means of which we are possessed of subduing inflammation of the eye, whether chronic or acute, and whether affecting the conjunctiva or the more interior structures of the organ. The practice, he informs us, is now generally adopted in Dublin. Dr. Crampton subjoins a report of the ophthalmic cases received into the Royal Military Infirmary during the last seven years, as affording the best testimony that can be adduced of the safety and efficacy of the practice here recommended. It appears that during the above-mentioned period 2074 were received, of whom 5 were blind when admitted, and 9 passed afterwards for pensions in consequence of lost or impaired vision. There went cured then to their respective regiments 2060 out of the 2074—an astonishingly large proportion considering the delicacy of the organ affected. In a large majority of these cases (including every kind and

degree of inflammation of the eye) leeches were repeatedly applied to the conjunctiva, under the direction of Staff-Surgeon Stringer, and our author can distinctly state that, not only in no instance was the practice attended with any inconvenience, but that in by far the greater number of cases, the application of one, or at the utmost, of two leeches to the conjunctiva, had a more decisive effect in unloading the inflamed and turgid vessels of that membrane, than the application of five times that number to the temple and eyelids. It is hardly necessary to observe that this measure is not to supersede the other proper measures usually resorted to in cases of ophthalmic inflammation. The present remedy is evidently one of considerable economy.

"With respect to the manner of applying leeches to the conjunctiva, nothing can be more simple. The patient should be placed with his back to the light, in order that the lower eye-lid may be everted without exciting pain; a leech or two, rather below than above the middle size, should be allowed to fix upon that part of the inflamed membrane, which covers the tarsus, taking care that it fastens neither upon the ciliary margin, nor upon the eye itself.* The leech fixes and fills himself in this situation much more quickly than upon a cuticular surface, and this observation is equally true with respect to all internal surfaces, for which I observed that leeches have the strongest appetency.†

Encouraged by this success our author was led to extend the principle to a surface more difficult of access than the conjunctiva—viz. to the mucous membrane of the fauces or throat, in severe cases of cynanche tonsillaris. He first made the attempt in the case of a young person who had a

* "In several instances I have, (from inattention upon the part of the operator,) seen the leech fix upon the conjunctiva which covers the sclerotica, but this was attended with no other inconvenience than a temporary ecchymosis."

† "In Egypt and in the Balearic islands those who drink of the stagnant waters are subject to great inconvenience and even danger, from a small leech, which attaching itself to the internal fauces, continues to suck blood, until, from the size of a horse hair, it acquires the dimensions of a common leech." 228.

severe inflammation of this kind, and it was effected with less difficulty than was expected.

"A single thread of silk was passed *through* the body of the leech, at about its lower third, the ligature being made fast to the finger of the operator, the leech (held securely between the forefinger and thumb) was introduced into the mouth, and its head directed by a probe, was brought in contact with the inflamed tonsil. The animal fixed itself to the part in an instant, and in less than five minutes, being gorged with blood, it fell upon the tongue, and was withdrawn. The relief was immediate. The tonsil continued to bleed for three or four hours. On the following day the inflammation had greatly abated, and in a few days the tumour had completely subsid d without suppuration." 229.

In the month of Septemher, 1819, our author was called to a gentleman who had been suffering for 16 hours under a severe attack of cynanche tonsillaris, the tonsils being in contact from the inflammation, which had extended to the velum and uvula, the latter being œdematous. Two leeches were directed to be applied to the tonsil and velum, and an emetic to be taken after the leeches fell off. The leeches procured immediate relief, and on the day following, the patient was able to leave his room. He could report many similar cases, but thinks the foregoing sufficient. When scarlatina was prevalent in Dublin two years ago, he had numerous opportunities of witnessing the great relief obtained by the application of leeches to the tonsils, when the inflammation of the mucous membrane ran high, and he can, therefore, state with confidence, that local blood-letting in this way, when early employed, affords one of the most powerful means of relieving the most distressing symptoms of this dangerous disease.

The application of leeches to the nostrils, vagina, and, other internal parts, so common on the Continent, has not yet received such notice in this country as it deserves. Dr. Crampton's paper will, in all probability, excite the attention of our brethren to the subject.*

* Since the foregoing analysis was drawn up, an anonymous writer in the

2.—*Case of a large Coagulum of Blood and Urine extracted from the Bladder, by means of a Syringe.* By L. Byron, M.D.

It is a well known fact, that extravasated blood will coagulate at the ordinary temperature of the human body, so that when effused into the bladder, and mixed with the urine, in cases of injury or disease, one firm mass of coagulum may be formed. To a moderate extent this is not of much consequence, as it will be gradually dissolved and removed; but should the bladder be so far distended with blood as to have its office obstructed, or the function of the kidneys affected, the case becomes one of great importance, and requires the promptest measures for relief.

In the following case much benefit was obtained by the use of the Syringe, although the application of the instrument was too long delayed to effect a cure.

On the 9th of November, 1820, a robust man, 64 years of age, was attacked with retention of urine, which he ascribed to hard riding during the preceding day, the air being damp and cold. Our author saw him on the evening of the 10th, 30 hours after the attack had commenced. The pain (referred to the glans penis) was excruciating, with constant desire to empty the bladder, and frequent stools with tenesmus. Three pints of high-coloured urine were drawn off by the catheter, considerable resistance being given to the introduction of the catheter by a stricture near the bulb of the urethra, and also by an enlarged prostate gland. Twenty ounces of blood were taken from the arm—the bowels were freely opened by castor oil—the warm bath was used—leeches applied to the perineum—an enema exhibited—and fomentations applied to the hypogastrium and

Medical Repository for June last, confirms the report of Dr. Crampton, as being an eye witness of the success of the measure recommended. He quotes a passage from Magneto, a Prussian physician, in the year 1703, which hints at the application of leeches to internal surfaces; but only the internal nares are mentioned in the passage of Magneto.

perineum. In six hours after catheterism the symptoms became so urgent as to render a repetition of it necessary, by which 20 ounces of high-coloured urine were drawn off with much relief. The urine was obliged to be drawn off every day till the 15th, when, having made a little water, while in the bath, he found himself so much better as to sit up for three hours, which imprudence was followed by an aggravated degree of all his former sufferings. When the catheter was introduced (with much difficulty) nothing passed but a few drops of blood. By management of the instrument, however, four ounces of urine were abstracted, followed by blood which obstructed the openings of the catheter, and rendered its removal necessary. The antiphogistic means were rigorously used for two days, without benefit—and no urine had passed during that time. The bladder could be felt distended through the rectum—the pulse was 100—tongue loaded—countenance expressive of much anxiety—hiccup. On the 18th, a large sized silver catheter, with one oval opening near the extremity was introduced into the bladder, and the pipe of an eight ounce syringe was adapted to the external orifice of the instrument. By repeated quick strokes of the piston, two ounces of firm coagulum of a black colour and urinous smell were drawn off; and by repeating the operation sixteen ounces more were abstracted, affording great relief to the patient. 19th—About eight ounces of a ropy dark brown matter were drawn off. 20th—Six ounces abstracted. 21st—Some ropy urinous matter passed involuntarily. He expired on the 24th in a state of coma, the catheter having been introduced the preceding day, but the bladder found empty. No leave was permitted to examine the body.

Our author considers it remarkable that surgical writers should be altogether silent on the use of the syringe in cases of retention of urine arising from coagulated blood in the bladder. This case clearly proves that the syringe has power over such coagula, and we have no doubt that it will be used on proper occasions by our surgical brethren.

3.—*Case of Obstructed Œsophagus, &c.* By John Howship, Esq.

Mr. Howship was summoned to an aged woman in one of the infirm wards of the St. George's Infirmary, who was said to be dying. He found her on her feet, with every expression of despair in her countenance, oppressed by the most extreme dyspnœa, and on the eve of suffocation. He was told something had stuck in her throat while eating, and on inquiring where she felt distress she pointed to a particular part of her throat, which appeared to be opposite the upper edge of the sternum. Having patched up a temporary probang, (it is rather surprising that there should not have been such an instrument in the Infirmary,) of such implements as he could procure, Mr. Howship passed it down the throat of the woman to the piece of meat forming the obstruction, and pushed this substance down nearly into the stomach, when relief was immediately obtained, it being evident that the mechanical pressure on the trachea had been the sole cause of the severe symptoms.

4.—*On a Paralytic Affection of the Superior Extremity.* By Robert Healy, M.B.

This affection, our author has not seen described in books, and believes it to be unconnected with any organic disease of the brain or nervous system. It attacks persons of all ages and both sexes. Prior to the assault the patient, generally speaking, is in the enjoyment of good health, consequently is much surprised to discover, on waking from a sound sleep, a total loss of power of one hand, and what is remarkable, the loss of power is described as extending to the middle of the fore-arm—in some cases to the elbow, accompanied with a sense of great numbness. No other cause could be assigned by the patients than the probability of pressure on the nerves occasioned by lying with the head resting on the arm. Most of the usual remedies for palsy

had been found ineffectual; but the disease invariably yielded to electricity strongly applied so as to draw pungent sparks from the diseased arm or hand.

5.—*A Case of Perforation of the Perineum.* By JOHN C. DOUGLASS, M.D.

EVERY one is acquainted with the common lacerations of the perineum which occasionally take place during the expulsion of the fœtus, even when the greatest care is employed. Indeed we are among those who believe that "supporting the perineum," as it is called, has little effect in preventing the accident, which occurs as often when the hand is applied as where there is no such artificial support. But be that as it may, the accident here described is of a more rare occurrence, and of a different kind. It has been termed by Denman a perforation or bursting of the perineum, and, according to Dr. Douglass, instead of being in the centre, it is usually situated towards one side of the perineum, involving in its necessary amplification the labium pudendi of the same side, with other parts, as will be shewn in the following case :—

A woman, aged 23, in her first labour, was in the lying-in-hospital on the 24th January, 1810. She was attended by a raw young pupil, and notwithstanding the previous tranquillity, the pupil and nurse were surprised and alarmed to hear the woman utter a shriek expressive of unusual suffering. Dr. Douglass was therefore quickly summoned, and found that the head of the child had protruded—but instead of being in the usual position, it was closely applied to the inner and posterior part of the patient's left thigh. While reflecting on these circumstances, another pain protruded the child's body. On viewing the parts, a shocking laceration was discovered, having the appearance of a large wound inflicted by external violence. Although denominated a perforation of the perineum, yet the opening was only partly comprised in the perineum laterally, partly in the left labium pudendi, but chiefly in the integuments of the thigh. Our

author found that the placenta obstinately followed the course which the fœtus had pursued.

Notwithstanding this extensive injury, no extraordinary activity of after-treatment was rendered necessary to obviate febrile action, and the woman ultimately recovered by judicious local treatment of the wound. Dr. Douglass is of opinion that, in this case, the head of the fœtus bearing upon the cervix uteri (the os uteri perhaps not sufficiently dilated) burst through the former, and through the vagina, passing completely behind the latter, at or near the sacro-iliac synchondrosis.

6.—*Cases of Jaundice, with Dissections.* By HENRY MARSH, A.B. M.D.

JAUNDICE, as our author observes, is produced by several different causes. In the majority of instances, however, its origin may be traced to some obstruction of a mechanical nature, as gall-stones, tumours, indurations of the liver, preventing the free egress of bile from the proper organ to the duodenum. These cases have been amply described and discussed by writers of all kinds; but there certainly are many cases of jaundice in which these mechanical obstructions are not apparent after death. It is still a question at the same time, whether or not some actual obstruction did take place in the biliary ducts during life, occasioning the suffusion of bile on the surface. That spasmodic constrictions of the bile tubes do sometimes take place, we have had *post-mortem* evidence; and that the same should take place during life, and yet become effaced by death, we cannot rationally doubt, from analogy and fair reasoning.

The object of this paper is to bring forward instances in which icterus is connected with derangements of other and distant parts, as the brain and mucous membrane of the intestines. The first case which arrested our author's attention was one already published in the first volume of the Dublin Hospital Reports, by Dr. Cheyne, from Dr. Marsh's notes. The subject was a wretched young woman, broken

down by disease and mercurial courses in the Lock Hospital of Dublin. She was seized with phrenitis, (while labouring under jaundice,) and died quickly.

" The condition of the large intestines in this female was very remarkable ; the quantity of knotted fæces which occupied the intestinal pouches was almost incredible; and this their condition the more claims attention, when it is known that alvine evacuations had been regularly maintained during the whole time of the residence of this patient in the hospital. These were fluid and watery stools ; such as are frequently carried off by medicine, whilst scybala in abundance remain behind. That this is often the case every physician is aware: but I believe it is not generally known that this state of the large intestines is sometimes a cause of jaundice.* While pursuing the dissection of the body of this female, the following curious appearance was exhibited: bile, mixed with a substance resembling curd, flowed in considerable quantity from the lactiferous ducts ; the mammæ appeared full, and by a very moderate pressure there were obtained several ounces of a tenacious yellow substance, bearing all the visible characters of pure bile ; all the serous membranes, as well as the skin and adnata, exhibited likewise the bilious tinge." 263.

We cannot certainly admit that bile or any other secretion can appear in the circulation anterior to its elaboration in its proper organ ; but we have strong proofs that a fluid, when once secreted and obstructed in its natural outlet, may become absorbed ; as urine, for instance, has been deposited in the ventricles of the brain, or thrown off by the skin or stomach. Of the latter fact our author has lately met with a well attested instance. In like manner the bile having been secreted, and prevented egress by the biliary duct, is ab-

* " Of this fact I was then ignorant, nor was it until long afterwards, having met with a similar case, that I was led to the conclusion, that a long continued obstruction in the large intestines becomes occasionally the immediate cause of icterus. The symptoms of the case which led me to adopt this opinion I shall presently relate."

sorbed, and appears in the skin, urine, tears, serous membranes, and brain. Our author received the following communication from Dr. Cheyne lately.

"'Last summer I visited a lady in jaundice with the following symptoms:—Skin and urine deeply charged with bile; slight anorexia; languor; stools pretty natural, as were the tongue and pulse. The indisposition was so slight that the individual in question had no intention of sending for a physician, till she discovered that the bilious tinge of her skin was imparted to her linen. To satisfy my doubts, she repeatedly wiped her face with a cambric handkerchief, which thereby acquired a saffron colour. Her liver was not sensibly affected in respect of enlargement or tenderness. She speedily recovered; indeed her recovery might be termed spontaneous, nothing having been prescribed for her but some mild purgative medicine. She was directed to use light animal food, to abstain from wine, and avoid fatigue.'" 269.

We shall now proceed to notice the case which our author has brought forward in illustratiou of jaundice from causes situated in the large intestines—the sympathetic connexion subsisting between the functions of the skin and liver being also remarkably exemplified in the same case.

An Octogenarian, of very irritable and anxious temper, long troubled with scrotal hernia and hydrocele, became affected with jaundice, for which he was treated by Drs. Perceval and Falloon, and the disease was removed. Several months afterwards our author was suddenly summoned to the old gentleman, in consequence of a discharge of blood from the rectum. He had complained of a dull heavy pain in that region for some time previously, especially when at stool. When seen the skin was yellow, harsh, and dry—the adnata deeply tinged—the pulse full, intermitting, but not quickened—the tongue black, dry, and thickly coated—urine scanty and high-coloured—vertigo—incoherence—somnolency. He was sitting on the night chair much alarmed. The matter evacuated appeared to consist of pure, dark-

coloured, clotted blood; and there were at the bottom of the vessel some hard round fæces. Suspecting the cause both of the hæmorrhage and icterus, our author ordered him two grains of rhubarb, the same of scammony, and the same of sulphate of potash, every two hours, till the bowels should be well cleared. By the following day a large vessel had been more than half filled with scybalæ, which were tinged with blood. A continuation of the same treatment removed large quantities of these hardened fæces, and with them the jaundice and all the other bad symptoms.

Whenever these accumulations were re-produced, the jaundice re-appeared, and with it loss of memory, drowsiness, and incoherence. On one occasion some slight paralytic affections accompanied the other phenomena, and were removed with them by the evacuating medicine above mentioned. By proper diet and aperient remedies the health was restored, as far as could be expected, at his advanced age.

"In this case," says our author, "we are furnished with another instance of the connexion which exists between obstruction in the large intestines and jaundice; and also of the connexion which may be traced between this latter symptom, and an excited and deranged condition of the cerebral functions. Here too, as in the former case, aperient medicines were daily administered; fluid fæces, slightly tinged with bile, regularly evacuated; and yet the bowels remained loaded with solid matter. I have remarked, in dissection, that in those pouches in which scybalæ are lodged, the mucous surface, against which they rest, is frequently reddened and vascular. The irritation of these hard substances accounts for the hæmorrhage, which in this old gentleman had been attributed to internal piles: it seems to me also that the loss of blood added much to the efficacy of the purgative pills, which probably would not otherwise have so effectually unloaded the bowels." 273.

We are disposed to think that the obstruction to the free course of the bile, in the foregoing and in analogous

cases, is mechanically caused by impacted fæces in the colon pressing upon the ducts of the liver.

Our author lays it down as a good rule, for the propriety of which he can vouch, that old people ought to be very abstemious if they wish to preserve a clear intellect. In old age the digestive, like all the other functions, become weak, and exercise, so necessary for due action in the chylopoietic vicera, is almost annihilated. Hence the necessity of proportioning the ingesta to the digestion and exercise.

A strong muscular man, 40 years of age, was admitted into one of the fever wards of the House of Industry, during the prevalence of the epidemic fever, deeply jaundiced —tongue perfectly dry and nearly black—pulse natural. He had a wildness in his countenance—declared he was quite well—and wished to quit the hospital. Arteriotomy and a purgative were ordered, but he obstinately refused all medicines, soon became furiously delirious, and died in convulsions the same night. Permission was not granted to open the body; but our author thinks that this is another instance of jaundice, terminating fatally in cerebral and nervous affection.

A young girl in the Lock Hospital, who had got cold while under the influence of mercury, was suddenly told of the death of an uncle, the only man who had shown her any kindness. She immediately became universally jaundiced, and soon afterwards febrile symptoms appeared. She was sent home, and continued feverish for some days, as also jaundiced. At length quite suddenly she became affected with alarming symptoms, as stertorous breathing, partial insensibility, great pain in the abdomen. As night approached she could hardly be restrained in bed—she screamed violently, and was constantly agitated. At 12 o'clock of the succeeding night she expired in convulsions. On dissection, which was performed a few hours after her death, some congestion was found in the vessels of the brain, but without any effusion. The substance of the liver was deeply tinged with bile, its structure being unaltered. The gall-bladder

was contracted, containing some dark green bile—a probe could not be passed through its duct—the other ducts unobstructed. Around the orifice of the ductus communis in the duodenum the mucous membrane was highly vascular—the fluid in the duodenum was untinged with bile. There was some increase of vascularity in the mucous membrane of the stomach—small intestines remarkably contracted in several places. "This," says our author, "is another decisive instance, wherein jaundice, caused by strong metal emotion, terminated in a violent and fatal affection of the brain."

Dr. Colles related to our author a somewhat similar case that fell under his care. A young gentleman, after going through an alterative course of mercury for the cure of a chancre, suddenly became deeply jaundiced, in three days after which he was seized with delirium, followed by repeated convulsions, which terminated in death. The most accurate examination of the body did not disclose any appreciable change of structure. The external and internal parts were much tinged with bile.

Our author quotes some analogous cases from Morgagni, and then proceeds to make some reflections. He properly remarks, that although in ordinary cases of jaundice there appears little or no cerebral disorder, yet that under certain circumstances, and in certain conditions of the nervous system phrensy may be excited, either by the bile conveyed to the brain, or in consequence of the sympathy which exists between the cerebral and biliary systems. In practice, therefore, we should be aware that an icteric patient, who has a weak and irritable nervous system, must be closely looked after, lest alarming symptoms unexpectedly arise, and lest we should be unguarded in our prognosis. The reciprocal influence of the brain on the liver, and of the liver on the brain, has long been observed and acknowledged. The following case illustrative of the fact that, in affections of the brain, the occurrence of jaundice indicates the rapid approach of dissolution, is very interesting in many points of view.

A gentleman, 36 years of age, muscular and well formed, had been intemperate in his youth, and had undergone several courses of mercury for syphilitic complaints—was habitually subject to headaches, especially after any excess in drinking. He was bilious, nervous, and irritable.

On the 23d of April, he had a fall on his side from a scaffold, about eight feet high, and was slightly stunned, but apparently not injured. In the course of the evening he complained of confusion in his head, which continued more or less till the 2d of May, when he had slight rigors and general indisposition. On the 4th he dined with a friend in Dublin and drank moderately. Next day he rode out into the country, where he was suddenly seized with violent pain in his head darting from temple to temple, and from the occiput down to the sacrum. On the 6th, there was an entire remission of the pain, but it returned at night. 7th, the same remission and exacerbation. 8th, was leeched plentifully, and purged freely. No relief ensued, and he was sleepless. On the 9th our author first saw him. The pain was in his temples and forehead—he appeared much agitated—complained of total sleeplessness—sighed occasionally—moaned often—pulse natural—skin cool—bowels free—tongue very white and moist. In the evening the pain become so intense that he requested to be bled. As his pulse had risen in strength and frequency, and as he was in constant agitation, a vein was opened, and he was allowed to bleed till he fainted, which produced considerable relief. The pain returned, however, shortly afterwards, upon trifling exertion, and with it the restlessness. He took twenty drops of laudanum, and slept two hours, when he awoke complaining of much pain, his countenance and manner expressive of unusual wildness. His pulse was full and hard, not frequent—skin hot. He was again bled, but syncope threatened before eight ounces of blood were taken. He was materially relieved, and passed a tranquil though sleepless night.

"10th. Symptoms very alarming; pain intense, seated in the forehead, temples, and at both sides of the head, in-

creased by the least exertion, even by the effort of speaking. When unexpectedly addressed, or touched with any cold substance, he was thrown into a state of great agitation: he complained of intolerable pain; could not breathe freely; a sort of convulsive struggle or catch affected the respiratory organs; his sighs were deep and frequent. Pulse full, and hard, and 92 in a minute: tongue loaded with a thick white secretion. Under these circumstances, bleeding was again resorted to. Twenty ounces were quickly removed; there was but a slight tendency to syncope; the symptoms were materially mitigated, but by no means subdued. At ten at night he was nearly in the same state as in the morning. In his extreme restlessness, he removed the bandage from his srm, and bled copiously. The relief was instantaneous. He passed a quiet though sleepless night. Ice was applied to his forehead, and every fourth hour a cup of the following mixture given;—℞. *Aq. ferv.* ℥xii. *Crys. Tart.* ℥i. *Ant. Tart. gr.* i. *Sac. albi* ℥ss. M." 286.

11th. He appeared better, but there was an evening exacerbation. 12th. Still better; but at midnight an exacerbation of pain with restlessness. Sixteen leeches to the head, which brought great relief. Heaviness and numbness in the head were now the only symptoms complained of; but he could not sleep. 13th. Unceasing loquacity, peevishness, and irritability—at night his intellect deranged for the first time. 14th. Severe pain in the right temple. Ten leeches applied, which entirely removed the pain, but rendered him very faint. Now came on muttering and incoherence, grinding of the teeth, heaviness about the eyes, impaired memory. His tongue was clean, skin cool, pulse natural. 15th. Stupor—remarkable change of countenance, being of a deep yellow tinge—night sleepless. 16th. Took food with pleasure—upper half of the body covered with a profuse perspiration of a peculiar and heavy smell—seized with convulsions, and expired at 4 P. M.

" *Dissection*,—Performed twenty-four hours after death. On raising the dura mater, a thin layer of coagulated blood,

deposited between the arachnoid membrane and pia mater, extended on each side over a considerable space of the anterior lobes of the brain. A similar appearance was observed at the superior and posterior parts of the brain, under the parietal bones, and reaching downward to the occipital. Blood was likewise effused between the same membranes at the base of the cranium, and over the surface of the cerebellum; a layer of blood was also deposited between the convolutions in every part of the brain. The lateral ventricles with their cornua, the third and fourth ventricles, were entirely filled with one large, continuous clot of dark blood: connected with this, another, as large as a walnut, occupied the inferior part of the left anterior lobe, into which a ruptured vessel, capable of admitting a small injecting pipe, opened. The quantity of coagulated blood in the interior of the brain amounted to several ounces: we were allowed to examine only the head." 289.

There is, Dr. Marsh observes, a form of jaundice which appears in hysterical women, owing its origin, probably, to some commotion and disturbance of mind. The symptoms, at first, would lead to the idea that the patient laboured under a violent attack of bilious colic, or that a gall-stone was impacted in the ducts. Sydenham has given a description of this disease, as attacking women of a lax and gross habit of body, and such as have laboured under an hysteric affection, or been much reduced by difficult labours. "A pain, says he, not less severe than that of the iliac passion, is felt at the region of the stomach, or somewhat lower, which is succeeded by copious vomitings of matter, sometimes green, sometimes yellow. To these symptoms are added a depression of mind, and despair exceeding that in any other disease. After a day or two the pain subsides, but returns with unabated violence in a few weeks. It is accompanied sometimes with a remarkable jaundice, which spontaneously subsides in a few days. The least commotion of the mind, whether it be anger or fear, brings back the pain." *Sydenham.*

"In the cases," says Dr. Marsh, "of this complaint which I have seen, serious mischief was done by mistaking the attack, in one instance for colic, in another for gall-stones. Where hysteria is at all suspected, the urine should regularly be observed: its limpid and copious secretion will often at once detect the real nature of the affection, and prevent all the injury resulting from needlessly active and vigorous treatment. The hysteric colic and jaundice are easily subdued. A few leeches, fomentations, moderate purgation, followed by opiates and tepid baths, will relieve the urgent symptoms; and in the cases which have fallen under my observation, change of scene, regular and wholesome diet, exercise on horseback, and mild aperients, have prevented their return. In these cases the subsiding of the pain was always accompanied with extrication and discharge of flatus, either upward or downward. It is singular that Heberden, so accurate an observer, should deny that there is such a disease as jaundice connected with hysteria, and blame Sydenham for having supposed its existence. By him the symptoms are referred to gall-stones:—indeed, in what he has written on the subject, he seems hardly to contemplate any other cause of icterus." 291.

Although we do not agree with Heberden in supposing that all these cases depend on gall-stones, yet we firmly believe that either a spasmodic constriction of the gall-ducts, or an obstruction of them by viscid bile exists at the time, and forms the leading proximate cause of the whole phenomena.

Our author next proceeds to the connexion subsisting between a jaundiced appearance of the skin, and a morbid condition of the mucous membrane of the bowels.

Here, as in the form just described, dissection leaves us in doubt respecting the immediate cause of the jaundice. The affection of the mucous surface of the bowels, our author observes, is constantly overlooked. Its symptoms are often obscure, and it may, he thinks, exist to a considerable extent, yet leave no trace of such existence after death. This

is not wonderful when we consider that a recent inflammation on the external skin seldom retains in the dead body any evidence of its previous existence. In such delicate structures also as the meninges of the brain, violent excitement may go on during life, without leaving cognizable traces on dissection.

"The usual cause of that form of jaundice, the consideration of which will occupy the remaining pages of this paper, is the ingurgitation of cold fluids into the stomach, when the body is much heated; or sudden and reiterated exposure of the person after severe exercise, to cold. In all such cases, the disease is not confined to the liver and its ducts; but the mucous surfaces of some part, or all the intestinal canal, are involved in the same morbid action. It is even probable, that, in these surfaces, disease first establishes itself, for the patient is usually ailing for many days before jaundice appears; and the symptoms of which he complains are amongst the number of those, which indicate commencing disordered action in some part of the villous coats of the bowels." 294.

Our author minutely details a long case of jaundice terminating in dysentery, of which we can only give the more prominent features.

A labourer, ætat. 55, strong and muscular, had been thrown into a profuse perspiration, by severe labour, and in this state drank repeated draughts of cold milk. During the next and several succeeding days, he felt cold, chilly, and weak, and presently became much jaundiced. His appetite was now gone, and his thirst insatiable. In a fortnight after the drinking of cold liquids, our author saw him for the first time, and noted the following phenomena:—viz. occasional syncope—prostration of strength—privation of sleep—dimness of vision—depression of spirits—palpitation—dyspnœa and cough—constriction at the epigastrium with great tenderness there—nausea on drinking cold fluids—great thirst—tongue moist and white in the middle—skin and eyes of a lemon colour—urine without sediment, but tinging linen

yellow—fæces white—pulse 60, soft and full—frequent and free evacuations from neutral salts, followed by considerable abatement of the symptoms. This was on the 24th July. On the 29th, sixteen leeches were applied to the epigastrium in consequence of much pain there, and then mercurial ointment rubbed on the part, a drachm every day—sulphate of magnesia was ordered to keep the bowels open. These produced much relief. On the 1st August, the appetite was craving—the thirst abated—skin lighter—urine very bilious—skin moist—great debility. 2d August, mercurial fetor—costiveness—slow pulse—purgatives operated. 4th—Pain in the temples and forehead—stools darker. 6th.—Occasional rigors—white fæces—pain in epigastrio—loss of appetite—periodical pains in the head. Blood taken from the arm—leeches to epigastrium—diminution of the urine—pain in the lower belly, which was removed by an enema and warm fomentations. 12th.—Stools still destitute of bile—eyes and skin deeply tinged—thirst urgent—great flatulency—much comfort from the tepid bath. September 3—Stools still clay-coloured, and now tinged with blood, becoming very frequent, with pain and tenesmus. Leeches to the abdomen—warm fomentations—a blister—repeated doses of Dover's powder. The dysenteric symptoms having disappeared, he continued for some days in an improving state apparently, when rather suddenly, towards the end of September, dysentery returned with extreme violence, the stools being dark-coloured, fetid, and full of coagulated blood, the jaundice being still unabated. In this state of suffering he lingered till the 8th October, when he expired. We shall give the dissection in the words of our author.

"The following morning, at nine o'clock, the examination of the body took place. The body was very much emaciated: a deeply yellow tinge pervaded the whole surface. The peritoneum, in every part, was coloured with bile: in its cavity there was a deposition of yellow fluid, in which flakes of lymph floated; the liver was shrunk, and retracted considerably within the margin of the ribs; the stomach was distend-

ed, and presented externally a very vascular appearance. The peritoneal coat of the large and small intestines was in extensive patches, vascular, opaque, and thickened. The vessels of the mesentery crowded together, and dilated. The cardiac portion of the internal surface of the stomach presented no unusual appearance; on approaching the pyloric extremity, the inner membrane was highly vascular, and a large patch was quite black. On laying open the duodenum, its surface presented a still more vascular appearance. This vascularity was extended along the whole tract of the small intestines, and was particularly evident upon the surface of the Valvulæ conniventes. The contents of the small intestines were every where mixed with bile. The ileum, near the caput coli, presented a highly inflamed appearance, and its contents were of a chocolate colour. The whole internal surface of the caput coli was deeply ulcerated, and covered with purulent matter; its coats were thickened: this gut was full of black, foul, and rather solid fæces, mixed with clots of pure blood. The colon and rectum were ulcerated and thickened in numerous patches throughout their whole extent. Wherever the ulcerations were most extensive, there the contained matter was most solid, foul and black; clots of black blood were every where mixed with the contents of the large intestines. The liver was diminished in size; fleshy excrescences grew from its convex surface; to the touch it was remarkably flabby and inelastic; its vessels very much dilated; its colour at every section intensely yellow. The gall-bladder contained several ounces of dark green bile; its duct at the superior part was contracted to a very small size. The remaining portion of the cystic duct was considerably dilated; as were the hepatic and common ducts, which were unobstructed. Wherever the liver was cut, green bile flowed from the enlarged ramifications of the hepatic ducts. The spleen was shrivelled, and possessed less tenacity than the crassamentum of healthy blood. The kidneys were flaccid and small, and all their vessels dilated. The viscera of the thorax were carefully examined, and did

not present the least morbid appearance. The dura mater was yellow; some (but very little) fluid in the ventricles; the brain remarkably firm and healthy. Of the contents of the cranium the dura mater alone was discoloured." 299.

We have invariably remarked that the *function* of biliary secretion was disordered in dysentery; and the above case offers no exception to the general rule. The liver, in fact, was organically affected; and that its function was greatly deranged appears, even by dissection, as the passage which we have marked in italics proves. We conceive also that the hepatic affection long preceded the gastro-intestinal irritation and inflammation—and that the depraved biliary secretion was a principal cause of the latter disorder. The deeply florid tongue, the unquenchable thirst, the extinguished or canine appetite, the prostration of strength, the rapid emaciation, and lastly, the dysentery, were all symptoms of the gastro-intestinal phlogosis. The probable immediate cause of the icteric suffusion in this case, was (thinks our author) an inflammation of the lining membrane of the ducts whereby they were thrown into a state of spasmodic contraction. This reasoning is illustrated by a case and dissection extracted from Dr. Hunter's Treatise on Army Diseases. A phthisical patient became affected with jaundice a few days before his death, and on dissection there were found marks of superficial inflammation all over the liver. The gall-bladder was full, but no bile could be squeezed out of it. Bile of a thick and ropy consistence was found stagnating in the ductus communis, as also in the hepatic ducts. Dr. Hunter asks—"*did the inflammation in the neighbourhood of the ducts and perhaps extending to them, excite such contractions in them as obstructed the bile?*" We think it highly probable; and, indeed, that in most cases of bilious fever the icteric suffusion is caused in this way.

"If the opinion be correct, that this form of jaundice (I mean that arising from cold applied to the heated body) is generally, or perhaps uniformly, complicated with an highly excited and sometimes inflamed state of the mucous mem-

brane of the bowels, it must follow of necessity, that the plan of cure should be directed, not so much to the condition of the liver, as to that of the neighbouring viscera. In all cases of what may be termed recent or inflammatory jaundice, in which, combined with the other symptoms, there is tenderness and fulness at the epigastrium, the treatment should be primarily and essentially antiphlogistic: bleeding, general and local; saline purgatives largely diluted; general and local tepid baths, should uniformly precede the use of mercury. I have seen cases of this kind, wherein the mercurial treatment had aggravated every symptom, yield at once to a bleeding from the arm, followed by the application of a few leeches. This I have observed, even where the pulse was not accelerated." 303.

Here our author introduces several additional cases of this form of jaundice, some of which were accompanied with purpura, on which, and several other diseases, Dr. Marsh makes many judicious remarks and ingenious comments. The cholera morbus, for instance, engages Dr. M.'s attention; and he very properly observes that, as it chiefly prevails during the autumnal season, when the alternations of heat and cold are sudden and frequent—and as it is often produced by drinking cold liquids when the body is heated, so "it owes its origin less frequently than is imagined to the nature of the food taken into the stomach." The symptoms, he thinks, sufficiently indicate the presence of morbid action in the mucous coat of the bowels.

"In this disease, the functions of the liver are so much deranged, that all the symptoms have been traced by the older writers to the irritating effects of a redundant secretion of acrid bile. That the hepatic functions are greatly deranged is certain; but that the symptoms are caused by the action of the bile upon the mucous surfaces, is now, I believe, acknowledged to be an erroneous opinion. In treating cholera morbus, the supposition that bile is the cause of all the mischief, has led to the adoption of remedies ill calculated to check the progress of this formidable malady. The patients have

been deluged with diluting drinks; and even emetics and cathartics have not been withheld. When it is considered that there is a cold stage, antecedent to that of reaction and excitement; and that the vomiting and purging exist for hours before bile appears in the matter ejected:—it must be evident that there is an highly excited state of the mucous surfaces, wholly independent of the biliary secretion. The cause of the cholera morbus, the symptoms, and the appearances after death, evince that the disordered action affects both the intestinal mucous surfaces, and the liver." 313.

Our readers are aware that we have long held this doctrine, and Dr. Marsh has liberally given us credit for priority upon this subject.

There is yet another form of disease, remarks Dr. Marsh, the seat of which is in the villous coat of the stomach and small intestines—this is the infantile remittent, or, as it has been vulgarly called, "the worm fever" of children. Its characteristic symptoms, he observes, if closely analyzed, will be found to point to the mucous surface as the original seat of morbid action.

"Irritation at the extremity of this membrane, as at the nose, lips, eye-lids, or verge of the anus, is a very constant symptom: the state of the skin, urine, appetite, and bowels, the defect of nutrition, with other symptoms, all lead to the same conclusion. In almost every instance of the disease the symptoms do likewise afford evidence of disorder or disease in the hepatic system. The tendency of affections of these membranes to assume an intermittent or remittent type is a very curious circumstance, and one of which no satisfactory explanation has yet been proposed. Inflammation of the conjunctiva of the eye and lids possesses occasionally a distinctly remittent character. The symptoms of an intermittent are now and again produced by irritation in the urinary passages. Affections of the mucous membranes often run a very protracted course, and yet leave behind no material change of structure." 317.

In the "bilious disorder" of this country, now so uni-

versal among all classes of society, the derangement of function, our author thinks, and with reason, is not restricted to the liver. It takes a wider range, and includes within the sphere of morbid action, those important viscera situated in the vicinity of the biliary organ, and from whence the nutritive particles which supply the body proceed.

We have thus given a very copious account of Dr. Marsh's paper, which is one of the most important and interesting in the volume under review.

7.—*A case of Diseased Heart, with Observations.* By Thomas Cuming, M.D. &c.

The subject of this case was a man 38 years of age, of spare habit, and appearing (6th Dec. 1820) slightly emaciated by illness. He stated that about the end of September of the same year, he was seized one day with so severe a pain in the middle of the sternum and in the bend of the left arm, that he was forced to go into a public house, where the symptoms subsided in twenty minutes. While walking homewards he was again seized in a similar manner, but he persevered in walking off the fit. Three days afterwards he had a recurrence of the paroxysm. From this time till our author saw him, he had generally two attacks daily, at 2 o'clock and at 5, attended with precisely the same symptoms, and generally lasting about an hour. In the intervals, as well as in the paroxysms, the patient had strong pulsation of the heart and large arteries, so as to be visible to a considerable distance. On applying the hand to the left side of the chest, the pulsation was felt all over that region, and downwards to below the umbilicus. The face was somewhat bloated, and there had been some œdema of the ancles for a few days—urine scanty and high coloured—some thirst. Could lie easier on the right side than on the left—subject to flatulence since his illness,*—and to an aggravation of a

* Flatulence is a remarkable and a very constant attendant on many organic diseases of the heart, especially on angina pectoris. It is still more

constitutional cough. Before Dr. Cuming saw him he had been twice bled, and blisters had been applied to the chest. He had taken purgative medicine, and draughts composed of digitalis, hyoscyamus, laudanum, and antimonial wine. The bleeding and blistering had relieved his cough, but no impression had been made on the paroxysms or pulsation. Rigid abstinence, quietude, aperients, and blisters were ordered, but no favourable change occurred—on the contrary, from the 7th till the 23d of December, he had seldom less than two, frequently three or four paroxysms throughout the night, and occasionally as many throughout the day.

"The pain of the arm was at times so excruciating as nearly to induce delirium; and whenever this was the case I observed he had but little corresponding pain of the sternum. On some occasions he had slight pain of the arm without any pain of the sternum. During the paroxysms the face was generally pale, and the body bathed in perspiration. Frequent attempts to expel flatus from the stomach generally attended each paroxysm, and he always felt considerably relieved after its expulsion. Although the pulsation was always strong, and communicated a vibratory motion to the bed-clothes, it was more violent during the paroxysm. His sufferings during the paroxysm were not aggravated, as in the case of angina pectoris, when he walked about; and when seized with it at night he was always obliged to sit up immediately in bed." 323.

Friction and grasping the arm relieved the pain on one or two occasions; and frictions to the chest generally brought some mitigation of the pain there and in the arm. Opiates failed to relieve the paroxysms.

On the 23d December, some soreness of the gums took place from calomel he had taken combined with ipecacuan. for some days previously. His urine increased in consequence, and the œdema diminished. The paroxysms con-

inexplicable than the pain in the arms and some other phenomena accompanying this melancholy class of maladies. *Rev.*

tinued as before. From this time, however, till the 1st of January, they were less frequent and severe than hitherto—particularly the pulsation, from which he was sometimes entirely free. On the evening of the last mentioned day, he was seized with a violent fit of coughing, which lasted without intermission till 2 o'clock the following morning, obliging him to sit up in bed all that time. From this hour till 7, he laboured under incessant dyspnœa, with gasping for breath. For several nights after this, he was obliged to sit propped up in a chair, on account of a sense of impending suffocation. From this time till the 13th of February he fluctuated, sometimes a little better, sometimes worse. He died on the morning of the last-mentioned day. He was examined in the presence of several eminent medical gentlemen.

"The right side of the chest contained from 6 to 8 oz. of fluid. The right lung was adherent to the parietes at the lower and back part by strong membranous bands. These adhesions, it was, however, evident, were not of recent formation. The lung itself was thickened, and its texture more than usually solid. When cut into, a frothy mucus flowed out. The left side of the chest was apparently healthy. The pericardium was considerably enlarged, and contained about four ounces of fluid. It was not thicker than natural; but on the external surface its vascularity was increased, more particularly towards the left side. The heart was fully double its natural size. The external surface of the left ventricle was highly vascular, and towards the base of the heart presented a granulated appearance. This appearance did not extend to the right ventricle. The coronary arteries were larger in proportion to the size of the heart, but in every respect healthy. The right cavities were increased in size, but otherwise their appearance was natural. The great increase of size was in the left ventricle, whose cavity was so much enlarged, as to admit of the hand being turned round in it with facility. The parietes of the

left ventricle were thinner than natural, and the musculi pectinati more projecting.

"The tricuspid and mitral valves were perfectly healthy, as were also the semilunar valves of the pulmonary artery. The valves of the aorta presented a shrivelled appearance; their margins were irregular, thickened, and of a cartilaginous consistence. When stretched to the uttermost, they did not reach within the tenth of an inch of the openings of the coronary artery. The aorta, throughout its entire course, was perfectly healthy, with the exception of a small opaque spot near the heart, which in reality could not be called a morbid appearance." 327.

Nothing worthy of notice appeared in the abdomen, excepting the great distention by flatus of the stomach and bowels.

Our author observes, that the violence of the heart's action, conjoined with a strong, full, vibrating pulse, left no doubt on his mind that the case was "active enlargement of one or both ventricles of the heart." He was, therefore, not a little surprised "to observe a condition of parts the very opposite of that which he had been most confident of finding." When Dr. Cuming has attended more to cardiac diseases, he will find that it is not so easy a matter to distinguish, *by symptoms*, that enlargement of the heart which is attended with thickening of its parietes, and that which is *not* attended with thickening. In extreme cases, indeed, the diagnosis will not be very difficult. For instance, if the cavities are greatly enlarged and the parietes greatly extenuated, we will not have such a state of the pulse as described in the case above; but where the heart is double the natural size, and yet where the parietes are somewhat thinner than natural, we may, and very often will have a preternatural action of the organ, manifested by the pulsations in the chest and in all tangible arteries. Such was the case in Dr. Cuming's patient. We do not look upon the heart as *passively* enlarged by any means—on the contrary, we consider it a case of hypertrophy of the organ, although the parietes were

not thickened. The action of the heart too was that of hypertrophy. This case shows us, as we stated in our last volume, page 810, that "the train of phenomena presented in angina pectoris is produced by various and often dissimilar affections of the heart." The patient of Dr. Cuming's evidently laboured under what is commonly denominated angina pectoris. The infarcted state of the lungs was a consequence, no doubt, of the embarrassed action of the left ventricle, on account of the imperfection in the ventriculo-aortic valves.

8.—*A Case of Fatal Hæmorrhage, Six Weeks after Ligature of the Carotid Artery.* By J. W. Cusack, M.D.

A young hypochondriac, attempted suicide by inflicting a deep wound in his throat with a knife, on the 26th August, 1820, and was immediately conveyed to Steven's Hospital, where our author saw him a few minutes after admission. He was recovering from a faint, his breathing laborious, and his pulse scarcely perceptible. The wound extended from the sterno-mastoid muscle of the left side, crossing the centre of the thyroid cartilage, to the angle of the jaw on the right side. The thyroid cartilage was almost completely cut through. The sheaths of the large vessels on both sides of the neck were exposed, and the pulsations of the carotids visible. The parts were dressed superficially, but at 7 in the evening, blood gushed from the right side of the throat and the patient fainted before the blood could be restrained. Our author had no doubt that the carotid or one of the large branches was wounded. A ligature therefore was applied to the trunk of the vessel, and also to the thyroid artery of the opposite side, which was exposed and had its coat injured. On the 24th, the patient was in a feverish and bad state, the wound looking unhealthy, and a slight hæmorrhage having taken place. Bleeding and digitalis removed these symptoms, and the patient appeared to be doing well till the 16th of September, when he became harassed with a pectoral affection, which, however, subsided before the 1st of

October. By the end of the second week in this month the wound had closed, except a small opening, about three lines in diameter, in the thyroid cartilage. On the 15th of October he complained of pain, and a slight fulness about the mastoid muscle—the wound looked unhealthy, and fever was present. Saline purgatives—poultices—quietude—abstinence. At four o'clock on the 15th blood suddenly gushed from the wound, and was partially restrained by pressure. When Dr. Cusack saw him it was evident that the carotid had burst, and it was determined, in consultation, that the vessel should be secured nearer to the sternum. This was rendered difficult by the close adhesions which had consolidated the cellular texture. After exposing the sheath of the vessels about half an inch above the origin of the subclavian artery, our author made an opening into it; but, after passing the ligature, and tying the knot, his efforts were fruitless, as on removing the pressure the hæmorrhage recurred with undiminished violence, and the patient's existence was soon terminated.

"*Dissection.* After the integuments were removed from the course of the right carotid, the sac of a small abscess was exposed, occupying the situation of the first ligature. Its lateral diameter did not exceed one inch, extending from the opening into the larynx to the right side of the sheath of the vessels. Its extent from above downwards was less. The lower extremity of the carotid was visible, it was distant from the upper about half an inch, both were pervious, and the edges of their orifices were ulcerated and irregular. In prosecuting the dissection, the parts were found closely consolidated. The sheath adhered so closely to the vessels and the cellular texture surrounding it, that no infiltration of blood could have taken place. Having removed the larynx and trachea, with the vessels on each side, the injured carotid was slit open; its coats were found considerably to exceed in thickness those of the artery on the left side." 342.

9.—*A Case of Traumatic Tetanus, successfully treated by Tobacco; with Observations.* By JAMES O'BEIRNE, M.D. Surgeon Extraordinary to the King, &c.

DR. O'BEIRNE observes that "much of the capricious and *unmanageable* character of tetanus may, with strict justice, be imputed to the want of any philosophical views of either its seat or its causes." As tetanus has been treated upon every possible hypothesis as to its etiology and pathology with nearly the same success—or rather want of success, so, we fear, that it would still maintain its *unmanageable* character, were its seat and causes ever so well known. By this observation we do not wish to check inquiry, but to moderate anticipations in respect to therapeutics. We are convinced that in many diseases, the extension of our investigations will be the abridgment of our hopes of cure. Knowledge will shew us good and evil. It will show us what we *can* do—and, alas! what we *cannot* do, which will be a great advantage after all, though sufficiently mortifying to human pride. It is highly probable that there is, even now, as much mischief done by ignorance, as benefit conferred by skill, in the unlimited field of medicine! The progress of science will have a constant tendency to check this evil, alike distressing to humanity and degrading to the profession.

To return to tetanus. Dr. O'Beirne enters pretty fully into the various hypotheses and conjectures which have been entertained in ancient and modern times respecting tetanus. It was natural enough, on seeing the voluntary muscles so much affected, and the sensorial function so unimpaired, to place the seat of the disease in the medulla spinalis, the source of the nerves supplying the said muscles. Galen, therefore, gave this opinion, and has been followed by Fernelius, Willis, Hoffman, Burserius, and several others, whose examinations of the spinal brain gave an importance to the theory which a mere hypothesis could never have attained. This theory, however, like many others,

sank into neglect or was totally forgotten till within these few years, when anatomical examinations of the spine have again attracted the notice of the profession. Some physiological facts were calculated to awaken our attention to this subject:—Thus Walther produced artificial tetanus by plunging a very slender stiletto into the spinal marrow of a frog, after the head had been severed from the trunk. The same phenomenon was observed to ensue on pressure being made upon the cerebral extremity of the medulla spinalis of such acephalous fœtuses, as, for a short time, survived birth. It was reserved, however, for Le Gallois, Philip, Brodie, and some others, to produce, by direct experiments on the nervous system, results both surprising and unexpected, confirming the experiment of Walther, and exhibiting numerous other curious and important phenomena Dr. Saunders, of Edinburgh, has long been investigating this subject, and has already laid many important facts before the public. It is well known that this gentleman states his having almost invariably found appearances of inflammation or vascular turgescence in either the tuber annulare, medulla oblongata, or medulla spinalis, of tetanic subjects. In trismus these appearances were confined, in many instances, to the tuber annulare and medulla oblongata, while the spinal marrow remained healthy. Dr. Reid, of Dublin, has published some curious circumstances tending to elucidate the same subject. Although other investigators have not been able entirely to confirm these views by anatomical proofs, yet there can be no rational doubt that the spine is the fons et origo of the formidable disease under consideration, and that we are in the right path of investigation, though, probably, a long way from the end of our journey.

In what way the reputed causes of tetanus produce the morbid condition of the spine and irregular function of the nerves arising from it, is no very easy matter to explain. Our author thinks it incumbent on him to attempt something like a ratio symptomatum in this case, though with much

modesty. As tetanus follows so small a number of wounds, comparatively, Dr. O'Beirne thinks it reasonable to conclude that some predisposition or peculiarity must exist in the constitution of the individual attacked, and if this could be ascertained it would be a great object to remove it. He divides the causes then into exciting and predisposing. Under the first class must be reckoned wounds, the action of cold, atmospheric influence, passions of the mind. The class of predisposing causes is large, and many of its items have been glanced at by our author.

Heurteloup mentions a case where the intestines were blocked up with cherry-stones—and many cases of cholera end in tetanus. Mr. Abernethy found the chylopoietic functions out of order, and Dr. M'Arthur has described a "peculiarly offensive smelling yellow matter" pervading the intestines of tetanic patients. Constipation has been often observed to precede this disease. Worms have been very often found in the intestines of those who died of tetanus, and Dr. O'Beirne thinks they are more frequently the cause of this disease than is generally supposed. During life the constipation prevents their discharge, and after death it is but too usual to neglect laying open the whole length of the intestinal canal. To this it may be added that, when worms do exist, they are generally crowded into one spot, and thus may easily elude detection, unless a careful examination be made. As the predisposing causes have been almost exclusively traced to the organs subservient to digestion, our author is led to look upon the splanchnic system as the medium of communication between these organs and the spine, "from which, by a reflected operation, the original sources become themselves excited in their turn." The comparative success which has, of late years, attended the purgative plan of treatment, affords, our author thinks, strong confirmation of the doctrine in question. He gives us the melancholy information, that out of about 200 cases of traumatic tetanus which he witnessed in the Peninsular army, not one recovered. The antispasmodic plan was more em-

ployed than the purgative, and he cannot recollect that the spine was ever examined. If our author's views of the etiology of tetanus then are admitted, they necessarily lead, he thinks, to the following indications of cure, viz. 1st. To have recourse to the most powerful remedies for overcoming constipation and destroying worms. 2dly. To employ those which show the most decided empire over the nervous system. Of all modes of treatment, observes Dr. O'B. "the combination of the purgative and antispasmodic plans has been the most generally successful." Under such circumstances our author thinks it strange that tobacco, which concentrates within itself such various properties, and has shown such marked influence over diseases of the same class, should not have been frequently and fairly tried. The earliest instance of its mention or employment in tetanus, was by the late Mr. Royston, in his Medical History of Tobacco, in which he states that Dr. Edmund Gardiner published a little work in the beginning of the 17th century, entitled the "Triall of Tobacco," asserting that the "suffumigation of tobacco being taken is a good remedy for the starkeness or stiffness of the neck called tetanus," &c. Baron Larrey applied poultices of tobacco leaves to the wounds of many of the soldiers who were affected in Egypt with this disease, but without any alleviation of the symptoms. Mr. Thomas Duncan, of Grenada, relates a case cured by tobacco-smoke; and on the authority of the same gentleman, it appears that Mr. Harris, Surgeon of his majesty's ship Magnificent, after Rodney's victory in the West Indies, recovered a case of traumatic tetanus by the fumes of tobacco blown up the nostrils. But it is time to give an account of the case which led to these observations and researches.

Case. J. Flood, aged 13, a healthy strong boy, had his feet miserably torn by approaching too near some machinery, on the 16th of August. He was immediately conveyed to the Charitable Infirmary, and had not been exposed to cold or wet. Emollient poultices were applied, and the bowels

opened by sulphate of soda. In a week the wound exhibited a sloughy appearance, and the boy was slightly delirious. On the 25th of August, he complained of stiffness of the neck, and pain in turning the head—bowels constipated. Next day the rigidity of the neck was quite perceptible. 27th, Complete trismus—slight opisthotonos—bowels obstinately confined. On the 30th, all the symptoms being aggravated, it was determined to use the tobacco-glyster, (a scruple to the half pint,) and to repeat it the same night. The injections could not be forced up during the tetanic paroxysms, so powerful was the constriction of the rectum. In the intervals, however, they were passed up with ease. Each enema was retained about two minutes, and caused nausea, vomiting, copious perspiration about the head and chest, tendency to deliquium, and sense of great heat through the intestinal canal. The general symptoms were rather worse on the 31st. The injections to be twice repeated this day again. Sept. 1st. One of the injections yesterday brought down some black indurated fæces, and a dead lumbricus about one foot in length. Spasms less frequent to-day—neck less rigid. 2d. Had two injections yesterday. Continues better—deglutition more easy. These enemas were continued with more or less frequency till the 17th of September. They generally opened the bowels copiously, and relieved the tetanic spasms. By the 8th of October the spasms had disappeared, and he completely recovered.

Dr. O'Beirne has filled many pages with reflections on this case—indeed he is rather too prolix; for a single case can do no more than authorize further trials, without exciting any thing like sanguine hopes, or forming any basis for general conclusions. It appears to us that the principal indications of a useful kind, which the tobacco enema is calculated to fulfil, is the evacuation of the bowels. From the state of the sphincter and of the rectum, we may fairly conclude that the whole line of the intestinal canal participates in the tetanic spasms, and therefore the tobacco, cautiously administered, and properly proportioned, may be a very

useful mean of overcoming this rigidity, and keeping up a soluble state of the bowels, so highly desirable in this formidable disease. It is always to be borne in mind, however, that tobacco is very uncertain in its effects on different individuals, and even on the same individual, in different circumstances. The dose should therefore be small at first, and the effects carefully watched.

10—*An Account of two Cases in which Bronchotomy was performed.* By Richard Burgess, M.D.

Our readers will remember some cases of violent inflammation about the larynx produced by children swallowing hot water out of the spouts of tea-kettles, as described in the Medico-Chirurgical Transactions, and analyzed in this Journal. The cases in the work before us are of a similar nature. In the first case the mouth, tongue, and fauces were severely scalded, so as to prevent deglutition, and considerably impede respiration. On looking into the mouth two hours after the accident happened, "it appeared as if a large piece of raw flesh had been forced into the fauces, and had completely filled up the passage." Respiration was very difficult, and becoming more and more laborious—in fact, the child appeared to him to have but a short time to live. Bronchotomy was therefore performed with some difficulty, and relief was instantaneously obtained. The usual treatment for inflammation was pursued. About the 8th day deglutition was practicable, and on the 10th, air could be breathed by the natural passage.

The second case was similar; but our author did not see the child till eight hours after the accident. "She appeared lifeless;" Mr. Burgess opened the wind-pipe, and the child instantly revived. She died, however, in about twelve hours after the operation, in consequence of the attendants neglecting to keep the wound free from the mucus which collected within it.

11.—*Case of Strangulated Hernia, occasioned by a double Stricture in the Sac, of an hour-glass shape.* By RICHARD CARMICHAEL, M.R.I.A. Surgeon of the Richmond Hospital, &c.

IT does not follow that a case is extremely rare because it has never been described. Many things happen, and are known to individuals, but never recorded. Very many things daily happen, of an extraordinary nature, which are neither observed nor recorded. What has happened once therefore, we may reasonably calculate upon happening again, where observation is directed to the point. We are inclined to think that the case recorded by Mr. Carmichael, has not unfrequently been the unsuspected cause of failure in operations for hernia:—and if this be the fact, the circumstance about to be stated deserves to be treasured in the memory of the surgeon.

On the 6th of December, 1821, a middle aged man was brought into the Richmond Hospital with strangulated hernia, stating that the symptoms had come on the preceding evening. Every attempt to reduce the protruded parts by the taxis proved unavailing; but the symptoms not being urgent, the operation was deferred till next morning, and a further trial given to blood-letting, purgative pills, warm bath, and tobacco injection. These also failing, Mr. C. in consultation with Mr. Todd, proceeded to the operation. He first endeavoured to return the protruded parts (a scrotal hernia of the left side) without exposing them, but could not succeed this way in returning the hernia. The sac was therefore opened, and a knuckle of intestine disclosed of a livid colour, but not mortified, and a large volume of omentum, some of which firmly adhered to the lower part of the sac. The stricture which was formed by the neck of the sack gave way to the pressure of the finger, or was rather torn through by the nail, and the intestine was, in consequence, reduced with much ease. But greater difficulty was

experienced in returning the omentum, the major part of which was, however, reduced.

The patient being put to bed, and an enema exhibited, no motion followed. In the evening he was much worse. Numerous leeches were applied to the abdomen, and a large bleeding taken from the arm. Great gastric irritability. On the morning of the 8th he died.

"On examination—The contents of the abdomen were found free from inflammation; but neither the strangulated intestine nor omentum could be discovered. It was evident that they had not been returned into the cavity, although when operating I had pushed them as far upwards as my finger could reach into what I conceived was the cavity of the abdomen. Further dissection explained these perplexing and extraordinary circumstances. It was found that between the internal and external rings, the sac had expanded itself into a large cyst, which extended into the bason of the pelvis on the one side, and into the hollow of the ilium on the other, lying between the muscles, being covered anteriorly by the external oblique, and separated from the cavity of the abdomen by the peritoneum, the fascia transversalis, the transverse, and internal oblique muscles. In this cyst the inflamed intestines and the omentum were discovered, and found to be completely strangulated by the internal ring. I do not recollect any systematic writer on hernia who has noticed this hour-glass sac and double stricture; but having been ascertained in one instance, no doubt it has often occurred, and occasioned the failure of the operation, and as a fact of some practical importance deserves to be made generally known.

"Even had I been aware of this unlooked-for formation of the sac, I could not have removed the stricture of the internal ring in the usual way, as it lay far beyond the reach of the finger from the external ring; I should therefore have been obliged either to cut down directly upon the former, or else have continued the incision from the one to the other. The protruded parts thus being in this case subjected to

two strictures, there can be little doubt but that of the internal ring was the primary one, and the greater of the two, and that the strangulation was probably caused by the descent of an additional portion of intestine or omentum; while that caused by the external ring was probably but secondary, and produced by the swollen state of the intestine from the stricture above." 386.

The peculiar formation above described, Mr. Carmichael thinks, arose from a careless or injudicious use of the truss, which is generally applied by the patient so near to the os pubis, as to be only capable of closing the external ring, while the herniary tumour is allowed to remain between the two rings—a space which, as is seen in the case related, may be gradually extended from the increasing size of the herniary mass, while it is prevented from passing downwards by the application of the truss at the external ring. This case, therefore, should afford a warning both to surgeon and patient, respecting the application of the truss; and shews the necessity of placing the pad exactly over the site of the internal ring. From the experience of this case, our author would be extremely unwilling, on future occasions, to leave any portion of omentum unreduced, as its presence at the ring must prevent, in a great degree, the surgeon from ascertaining with proper accuracy whether any farther stricture remains undivided.

12.—*A Case of Dislocation of the Hip-Joint, with the Manner of its Reduction, and the Appearances on Dissection.* By James Scott, M.D. Surgeon to the County Infirmary of Armagh.

The recent morbid anatomy of dislocations must be rather defective, from the rarity of these accidents proving fatal, and consequently the rarity of anatomical investigations. There are not many cases on record of the post-mortem appearances in luxation of the hip-joint, and therefore the following particulars are deserving of universal diffusion. The patient was working in a gravel-pit when a bank fell in upon

him. In six hours after this accident he was seen by Mr. Scott. The thigh was shortened and deformed, the muscles flaccid, the knee and toes turned inwards. Every attempt at rotation outwards caused extreme pain in the groin, at the hip, and in the course of the sciatic nerve. The description of the reduction we need not notice, as our late numbers have contained enough on that subject. Shortly after the poor man was put to bed, it was discovered that a serious injury had been received in the abdomen, which caused his death in 36 hours after the accident.

"On dissecting down to the hip-joint, an extensive extravasation of blood presented itself in the cutaneous cellular substance, covering the trochanter major, and also beneath the fascia lata of the thigh, extending several inches above and below the trochanter. The gluteus magnus being raised from its origin, a considerable extravasation was found in the loose cellular tissue under the gluteus medius: a cavity capable of containing a pullet's egg was also brought into view. This cavity was situated directly where the great ischiatic nerve passes under the pyriform muscle; it contained fluid blood; its boundaries were the pyriformis above, the sciatic nerve before, (supposing the body upright,) the trochanter major, and insertion of the gluteus medius external and posterior, the gluteus maximus posterior. Here the displaced head of the femur had been lodged. The fleshy substance of the gemini and quadratus muscles was found torn across. The pyriformis and obturator internus were perfect. The extravasated blood followed the course of the sciatic nerve deep into the thigh. There was also extravasation between the gluteus medius and minimus muscles.

"The internal and upper part of the capsular ligament of the joint was ruptured; the external portion remained unbroken. On turning the head of the bone out of its socket, the ligamentum teres was found to have been torn from its insertion into the dimple of the head of the thigh bone. The brim of the acetabulum at its upper part was fractured

to the extent of about an inch; the fractured portion lay loose and nearly unconnected. A fracture traversed the acetabulum in the direction of the junction of the ileum (ilium) and ischium." 393.

13.—*An Account of a Dissection of the Hip-Joint after recent Luxation. With Observations on the Dislocation of the Femur upwards and backwards.* By CHARLES H. TODD, one of the Senior Surgeons to the Richmond Surgical Hospital, &c.

IN the summer of 1818, a robust young man fell from the window of a second floor into a flagged area, by which he fractured the cranium, and dislocated his left thigh upwards and backwards. The dislocation was reduced without difficulty, but an extensive extravasation of blood in the brain put a period to the patient's life in 24 hours. On the following day the examination was made of the injured joint and parts contiguous.

"On raising the gluteus maximus, a large cavity filled with coagulated blood was found between that muscle and the posterior part of the gluteus medius. This was the situation which had been occupied by the dislocated extremity of the femur. The gluteus medius and minimus were uninjured. The pyriformis, gemini, obturatores, and quadratus, were completely torn across. Some fibres of the pectinalis were also torn. The iliacus, psoas, and adductors were uninjured. The orbicular ligament was entire at the superior and anterior part only, and it was irregularly lacerated throughout the remainder of its extent. The interarticular ligament was torn out of the depression on the head of the femur, as in Dr. Scott's case, its attachment to the acetabulum remaining perfect. The bones had not sustained any injury." 396.

We are unable to give Mr. Todd's reflections and criticisms on Boyer, Richerand, Sir A. Cooper, &c. and therefore having stated the fact, we refer to the work itself for the comments.

14.—*On Diseases of the Lachrymal Gland.* By CHARLES H. TODD, &c.

OUR author observes, that although this gland is not so frequently affected as its situation, connexions, and sensibility would lead us to expect, yet it is more often drawn into disease than most writers allow.

The lachrymal gland is subject to acute inflammation, sometimes idiopathic, but in the greater number of cases, succeeding to conjunctival inflammation, or some other form of ophthalmia.

"The symptoms of acute inflammation of the lachrymal gland are, intense pain in the orbit, but particularly under the temporal extremity of the eye-brow, extending to the temple and cheek, backwards into the orbit, and even into the cranium; defective or profuse lachrymation; when the latter, which is most generally the case, the patient complains of the tears being hot and acrid, and in a few days the edges of the eyelids and the cheeks become excoriated to some extent; both palpebræ, but particularly the superior, are swollen, red and tense; inflammation extends to the conjunctiva and other membranes of the eye, and thus a severe and obstinate form of ophthalmia is produced. More commonly, however, inflammation originates in the conjunctiva, and is thence propagated to the gland.

"When the inflammation of this gland is at its height, there are much symptomatic fever and restlessness; flushing of the face, particularly at the affected side; acute pains darting through the orbit and head; and, as it is stated, more or less delirium, with strabismus, impaired vision, and protrusion of the globe proportionate to the size of the swelling." 410.

The remedies are, of course, general and local blood-letting, warm fomentations, mercurial and saline purgatives, antimonials.

Chronic Inflammation of this gland is a disease, Mr. Todd

observes, almost entirely confined to the early periods of life, and probably dependent on a scrofulous disposition. In this affection there is an obvious enlargement of the gland, with an occasional œdematous tumefaction of the upper eye-lid, the patient complaining of an inconvenient sensation of fulness, rather than pain, above the globe, and an inability to move that side as freely as the other. This produces strabismus, and double or indistinct vision.

"In this disease the best effects are obtained from the application of a few leeches to the neighbourhood of the gland, at as early a period as possible; from a succession of small blisters to the forehead, temple, and behind the ear; from small doses of calomel, blue pill, or some other mild preparation of mercury, with the occasional use of saline laxatives; and from such medicines as an imperfect performance of the digestive functions may indicate. Local applications, except where the conjunctiva or eye-lids are inflamed, or the cornea ulcerated, are unnecessary; and even in such cases the benefit derived from them will be small and of short duration, unless our exertions to restore the gland to an healthy state be effectual." 412.

Besides acute and chronic inflammation, the lachrymal gland is subject to enlargments, (scrophulous) abscesses, and scirrhus; for cases of which, we refer to the present paper.

15.—*Observations on the Treatment of Diabetes Mellitus.* By Henry Marsh, A.B. M.D. &c.

Dr. Marsh thinks that, since the publication of Dr. Rollo, and the investigations that followed, diabetes mellitus has lost somewhat of its hopeless and intractable character. Very small, we think, has been the loss; and as to the animal food treatment, the efficacy of which was, at first, scarcely doubted, it will be found, as Dr. Marsh observes, "greatly to disappoint the expectations of those who are disposed to place much reliance upon its virtues." There can be no doubt, indeed, that an exclusively animal diet may alter considerably the sensible properties of the urine,

and materially diminish its quantity, but even with the few who can endure such restriction, little will be done towards the removal of the disease. A partial adoption of this regimen will, however, be useful, and merit is undoubtedly due to Dr. Rollo for his discovery respecting the change produced in the saccharine urine by a total abstinence from vegetable matter.

Amongst the remedies which have been employed, opium in large doses has ranked high. It checks the flow of urine, and deprives it of many of its morbid qualities. Its effects, however, are of a transient nature, and when the medicine is withdrawn the complaint recurs. A permanent cure of the diabetes mellitus has rarely been accomplished, and a perfectly successful mode of treatment yet remains to be discovered.

A well-marked case of this disease was lately presented to our author's notice, and he naturally searched for all the information he could collect from books. While employed in these researches his attention was particularly arrested by the following important considerations.

"First, in many of the cases whose histories are recorded, the earliest disturbance in the general health could distinctly be traced to some cause acting upon the skin, and producing derangement of its functions. Secondly, *every* case of the Diabetes Mellitus is accompanied with a peculiarly morbid condition of the skin. In truth, I know not any disease, in which this symptom is so uniform and so remarkable. Thirdly, none of the remedies employed produced the slightest beneficial effect, until the skin began to relax, and a sweat to appear on the surface.*

* "See two cases of Diabetes treated by opium. *Transactions of the London College of Physicians*, vol. iv. In Case I, it is stated, p. 198, that 'the opium produced considerable perspiration, and on the following morning the urine was no longer sweet. The patient had felt great relief from languor since the opium had been resumed.' In Case II. p. 208, it is observed that, 'during the period in which the dose of opium had amounted to ten grains (taken four times in the day) the patient had perspired profusely, had been sleepy and giddy, but had suffered no other inconvenience: the

"These considerations led me to turn my attention more particularly to the state of the skin, and suggested the probability of advantage arising from the application of *vapour* to the whole surface of the body. The vapour bath was employed. The impression made upon the disease by the frequent use of this remedy surpassed my expectations. Its salutary effects, in giving a new action to the skin, were immediately perceptible. The perspiration having been afterwards maintained by warm clothing and continued bodily exercise, the patient daily improved in health; and at length quitted the hospital, under the conviction of his disease being wholly removed." 434.

Our author, after making several useful remarks on certain cases in Dr. Rollo's and Dr. Latham's publications, proceeds to a detail of the principal facts connected with his own case.

The patient was a shoemaker, 20 years of age, sallow complexion, great emaciation, full and prominent veins, skin a dingy yellow, permanently acrid, and glued apparently to the subjacent muscles; gums ulcerated; a small unhealthy ulcer on the right cheek; epigastrium tumid; tongue florid at margin and point, and covered in other parts with a thin whitish secretion; extreme listlessness, languor, debility; a sensation of weakness referred to the knees; dimness of vision; disturbed sleep; sensation of creeping coldness over

urine had a natural appearance and odour, and yielded a very inconsiderable extract.' A case is recorded by Dr. Darwin, in which opium produced salutary effects, at a time when it caused the patient so to sweat, 'that large drops stood on his face, and all over him.' Another case is mentioned by the same author, in which a course of astringent and tonic medicines did not in the least benefit the patient. Opium was at length given; it excited profuse perspiration, and great relief ensued. Emetics have been useful, so far as they have been effectual in determining to the surface. The Hepatized Ammonia has also had the effect of promoting perspiration. Antimonials, when effectual in exciting diaphoresis, have likewise been found useful. Blood-letting and the warm bath are valuable remedies, and their utility will be found proportionate to the power they possess of re-establishing the functions of the skin." See Watt on Diabetes, pages 27, 28, 29, 36, 38, 151, 152, 155."

the surface; appetite inordinate; thirst unquenchable; mouth clammy; digestion rapidly performed, with a craving sensation recurring soon after food is taken; costiveness; constant desire to make water, which is increased during the night. From 20 to 22 pints of urine are passed ordinarily in the 24 hours—the bubbles remaining on its surface, but limpid and almost colourless, its smell peculiar, and not easily to be described; taste very sweet. When evaporated, an abundant extract resembling coarse brown augar remained—pulse 85, and throbbing—neither cough nor dyspnœa. Such were the symptoms on the patient's admission into hospital towards the end of December. He stated, that in the beginning of the preceding November, while crossing from Liverpool to Dublin, then in perfect health, he encountered a violent storm, and was exposed to much wet, cold, and hunger, during four days. After quitting the vessel he felt himself constantly chilly, to which intense thirst succeeded, and he was perpetually swallowing large draughts of cold water. His skin he described as very dry, with a total want of perspiration, dimness of vision, and costive bowels. Languor and debility increased notwithstanding the large supplies of food; and at length he was obliged to abandon his ordinary occupation, and seek relief in an hospital.

On the 1st February, venesection to ten ounces, the serum being milky, the crassamentum firm. The symptoms were unaffected by the bleeding. From this time, on to the second of March, mercury was used externally and internally, in large quantities, without fetor of the breath, or increase of saliva, indicating mercurial influence. He lost ground during the use of this medicine, and at length was unable to leave his bed through weakness. On the 2d March, the vapour bath was tried, and repeated on the 9th, 12th, and 26th, the symptoms still continuing unabated, but with perhaps some slight accession of strength. From the 2d to the 27th April, all treatment, except daily purgation, was laid aside. The sweet urine often exceeded 24 pounds

in the 24 hours. On the last-mentioned date he was again placed in the vapour bath, half an ounce of the tincture of opium being mixed with the water. After remaining 20 minutes in the bath, syncope supervened, after which he became feverish and hot. At length the skin opened, and the whole surface of the body became covered with sweat. He felt immediately relieved, and on the following day was much better. On the 4th May, he was again put into the vapour bath with the tincture of opium as before. There was no tendency to faintness; but a copious perspiration followed, and was succeeded by a sound and refreshing sleep. On the 10th May, a note was made that his strength was improving daily—that he felt much less languid—skin soft and perspiring—pulse 88—appetite less craving—improved sleep—increase of flesh—gums still ulcerated. 18th May, urine almost colourless and very sweet, amounting during the preceding 24 hours to 24 pints—thirst urgent. May 22d, a temporary diarrhœa; during the increased action of the bowels, the urine assumed an amber colour, and acquired a urinous odour, being much diminished in quantity and saccharine quality—tongue cleaner—fæces yeasty—no perspiration—skin itchy. May 30th, urine still amounts to 21 pounds—pulse 100—no perspiration. Had been ordered for some time past an exclusively animal food diet, with lime water and milk for drink; but he secretly devoured whatever vegetable food he could procure. June 3d, a remarkable change in the symptoms—only 8 pints of urine during the last 24 hours, the perpiration being copious—great accession of strength, and diminution of thirst and appetite. The perspiration was produced by laborious exercise, the body being enveloped in flannel, and the weather being warm. From this period till the beginning of July, medicines of every kind were left off—he worked hard every day—was warmly clad, and sweated much. His food was principally vegetable—he daily gathered strength and weight—enjoyed sound undisturbed sleep, and felt himself so far relieved that he was resolved to return home and re-

sume his original avocations. A little persuasion induced him to wait some time longer under medical superintendance. But we cannot pursue the daily routine of treatment, which varied according to circumstances. In the month of September he quitted the hospital.

"I saw him on the first of January, 1822. There was not any return of the symptoms; the skin retained its natural softened feel; he weighed eight stone five pounds; his pulse was moderate: the expression of his countenance very much improved; though not exempt from thirst, it gave him no annoyance: his tongue was whitish; he felt strong, and alive to every enjoyment; he worked at his trade as a shoemaker, from an early hour in the morning, with little intermission, until late at night; his diet consisted of bread, butter, occasionally meat, fish, potatoes and gruel: the gums were very slightly ulcerated; the bowels, without medicine, were daily evacuated; the general quantity of urine, in the course of a day and night, varied from six to seven pounds; taste salt, slightly saccharine; colour still paler than natural." 449.

Such are the leading facts belonging to this case. Although we are far from thinking the patient perfectly cured, we grant that the case exhibits, in a striking point of view, the powerful effects of copious perspiration, whether produced by the vapour bath or muscular action, in controlling the symptoms of diabetes. Diaphoretics are, of course, no new remedy in this disease; but they have generally been exhibited internally, and have been ineffectual in rousing the action of the skin. The etiology of the disease in this case, seemed to point to the vapour bath as a powerful counteractor of the impression made by wet and cold on board the vessel. But having once relaxed the skin, and brought it into a perspirable state, it is of the greatest importance to keep up the said condition of surface, and this seems best done by exercise and clothing. It would appear necessary that the diabetic patient should never allow a day to pass without a certain quantum of exercise, if the strength will

at all permit. In the upper classes of society, horse exercise is a valuable remedy, as it excites perspiration without inducing fatigue. To exercise the patient will generally be very averse at first; but experience of its good effects will soon render it agreeable. The same cannot be said of the other remedies, as opium, animal diet, &c. In the case above sketched out, we omitted to state that a very considerable disgust was raised by the animal food—an event not very rare where such diet is exclusively used. We agree, therefore, with Dr. Marsh, that the cure of a disease so generally fatal as diabetes, should never be trusted to a single remedy. A regular and systematic plan of treatment should be entered on, while the exciting and maintaining a general diaphoresis should be considered an indispensable part thereof. For many suggestions and judicious observations on diabetes we must refer to Dr. Marsh's paper, which is creditable to his judgment and research.

ART. XIII. A *Treatise on the Diseases of the Eye.* By GEORGE FRICK, M.D. Ophthalmic Surgeon to the Baltimore General Dispensary, &c. &c. 1 Vol. 8vo. pp. 320. Baltimore, Fielding Lucas, jr. 1823.

"————————; why was the sight
To such a tender ball as the eye confin'd,
So obvious and so easy to be quench'd?
And not as feeling through all parts diffus'd,
That she might look at will through every pore?
Then had I not been thus exil'd from light,
As in the land of darkness yet in light
To live a life half dead, a living death,
And bury'd:————

THE most sublime, as well as the most useful objects of nature or of art, become common and lose their interest by familiarity. When we regard the eye as the organ which gives efficiency to every effort of industry, or existence to the widest circle of pleasure, derived from communication with external nature; when we reflect upon the extensive range of discovery which it has been an active instrument in collecting from the distant regions of the sky; when we contemplate the arts to which it gives rise,—painting and sculpture,—arts which have canonized the ancient cities of Italy and Greece, as the seats of beauty and of taste; this little structure acquires a grandeur and a rank among the organs of the system, which enables us to enter with feeling into the lamentation of the poet who suffered its loss, and to entertain the most profound respect and admiration for that science which repairs it.

In no department of pathological knowledge, has greater objects been attained, than in the minute investigation into the diseases to which the different tunics of the eye is liable, and the certainty with which they end in the destruction of vision, if not relieved by the hand of art; and that relief in most instances cannot be obtained, as we shall have occasion to show in the subsequent part of this review, except by an intimate knowledge of the diseases and the effects,

which they severally produce on the various tissues which enter into, and compose the globe of the eye. It is a fact of which we speak with regret, that in our own country, the diseases of this important organ have not received, from the generality of our medical brethren, that strict attention regarding their pathology and general treatment which so important an object demands. We should be doing injustice, however, to the great and able surgoen,* to whom the author of the treatise under notice, has with so much propiety inscribed his work, and many others of our countrymen, who have cultivated ophthalmology with much attention, if we depreciate their merits; yet while this interesting branch of the surgical art, has been practised with distinguished success by these gentlemen, the great mass of practitioners have remained ignorant of the many important distinctions which have recently been made in the diseases of the eye, and the new and highly improved methods for their treatment. Of late years, in England, France, Germany, and Italy, some of the first surgeons have devoted much of their time and attention, to the cultivation of ophthalmology, and he may now be said to be almost ignorant of the art, who has not made himself acquainted with the writings of Beer, Travers, Demours and Scarpa. In the United States the advantages for studying the diseases of the eye, are not so great as in Europe; the scattered population, the infrequency of organic diseases, and the want in the large towns, until recently, of suitable establishments exclusively devoted to diseases of this class, have all tended to retard the progress of our knowledge. The establishment of Infirmaries for the diseases of the eye, forms with us a new æra in this department of surgical science; combining a great variety of cases collected from different points, they afford ample resources for inquiry and research, into the various morbid changes, which result from diseases in the delicate textures of this organ, and will afford to the student that comparative illustration which, while it teaches him to discriminate its dis-

* Dr. Physick.

eases, necessarily leads to a more correct treatment of them. But it is time we had drawn the attention of our readers, to the very important volume before us.

The arrangement of the work of Dr. Frick is such as to embrace all the morbid alterations of the organ of vision in as good a natural order as the nature of disease generally admits, and it possesses all the advantages we are reasonably to expect from any classification whatever, that is, the collection of analogous cases into separate natural groups, and thereby assisting us in the acquisition of knowledge. Throughout the whole book is displayed a disciplined and extremely well read mind; the author is perfectly conversant with the subject on which he treats, and displays an intimate knowledge of the practice and writings of the most celebrated ancient and modern ophthalmic surgeons of England, France, Germany and Italy, and very much to his credit and the value of his production, he has not servilely adopted any of their opinions, but such as have been confirmed by observation and experience. In all doubtful cases he gives his readers the opinions of the most approved authors, compares them with each other, and then draws his own conclusions. To students and young practitioners, this method enhances the value of the book greatly, as they are too often left in doubt what course to pursue, in some of the most important and perplexing cases. This work comprehends a very complete and distinct account of all the principal diseases to which the human eye is subject. Dr. Frick very modestly informs us in his introduction, that, "The volume which is here offered to the public is little more than the abstract of a Course of Lectures, which the author had prepared upon the Diseases of the Eye. Several years attendance at the various hospitals of Great Britain, and the Continent especially, afforded him ample means and facility of observation on the various diseases of this organ; and this opportunity has been considerably augmented, since his return to his native country, by his appointment to the Baltimore Dispensary for the cure of diseases of the Eye."

We cannot proceed to the analysis of the work without first offering to the profession, from the introduction of our author, the very useful and important distinctions of *ophthalmic inflammation*, which we find here laid down, and we doubt not, they will be read with the interest which they fully claim from every cultivator of medical science.

"Although the immediate seat of inflammation be confined to the capillary seat of blood-vessels, yet this inflammation is found to assume various characters according as the affection invades different organs of the body, or different tissues of the same organ. The characteristic signs of inflammation, it is true, are to be found in all organs of the system; but these are so modified by the peculiar structure or function of the tissue, or other circumstances of the patient, as to afford a basis for numerous distinctions. Nothing is more certain than that every acute inflammation of an organ begins in a single tissue of its structure, and is accompanied by a set of phenomena indicative of the peculiar tissue affected; and when this inflammation extends to the adjacent tissues, it is attended with another train of symptoms alike indicative of the structure newly invaded. There is no better illustration of this fact than what is afforded us in the several varieties of this disease as it affects the eye and its appendages. Thus, the inflammation attacking the conjunctiva, is very different in its appearance and consequences from that which attacks the sclerotic coat, and both of these differ very widely from that inflammation which invades the iris, the lens or the retina. Again, the symptoms which characterize an inflammation of the meibomian glands of the eye-lids, differ essentially from those which manifest themselves when the lachrymal gland or sac becomes the seat of the affection. The general treatment in all these cases is the same, but each variety requires some modification of treatment, depending upon the difference of structure and function of the part attacked.

"Another and more important distinction of ophthalmia arises from the particular diathesis or morbid state of sys-

tem, in which the inflammation occurs. Such ophthalmiæ are termed *specific*, to distinguish them from the former or *pure* ophthalmiæ, the symptoms being variously modified according to the peculiar nature of the specific cause. Thus, in catarrhal ophthalmia, the redness is most prominent in that part of the conjunctiva which covers the sclerotic coat: there is neither pain nor any great degree of sensibility to light, whilst in the strumous ophthalmia, there is the greatest intolerance of light, epiphora, and spasm of the eye-lids, with scarce any discoloration of the eye-ball. In the syphilitic and arthritic inflammations of the eye, there is the most vehement pain in the orbit or adjacent parts, whilst the other symptoms are comparatively moderate.

"These different species of ophthalmia vary no less in the intensity of their symptoms at different stages of their progress. Some have very perceptible remissions; in others, we may even discover a complete and full intermission. Thus, in the catarrhal ophthalmia, the patient is almost free of complaint through the day, the paroxysm however returning with the dawn of evening, the same exacerbation still more distinctly marked may be observed in the syphilitic form of iritis. In strumous ophthalmia, on the other hand, the patient generally suffers most through the day, and is relieved with the return of night.

"There is this peculiarity also in the specific forms of ophthalmia, that they are always seen to attack particular tissues of the organ in preference to others. Thus, the rheumatic inflammation of the eyes constantly affects the sclerotic coat or the tendinous expansions inserted into it: gout and syphilis are generally seated in the iris or choroidea. In the treatment of these several varieties of ophthalmia, therefore, it will be necessary to attend not only to the violence and extent of the inflammation, but to the particular state of constitution with which it is connected, or the specific cause which has given origin to the disease." xi.

Ophthalmitis, or pure inflammation of the Eye, is the first subject treated under the general head of Ophthalmia. The

disease is described, and the appropriate treatment for its different stages, is stated with great perspicuity. Dr. Frick speaks very favourably of one or two leeches applied to the inner canthus, or immediately over the facial vein, which he believes are more beneficial, thus applied, than many more to the temples or lids; when used as he advises, they must produce a very powerful effect, and the troublesome erysipelatous inflammation which generally follows their application to the lids, is entirely avoided. After general and local bleeding, he considers scarifications of the ball very serviceable, provided they be numerous, deep, and bleed freely. Those who have been in the habit of treating inflammations of the eyes, will freely confirm the above precept, which has only been rejected by some, and advocated by others, according as the operation was more or less perfectly performed. We have found scarifications occasionally injurious, but the failure in these cases, was invariably caused by the reluctance or opposition manifested by the patients to submit to a perfect operation, which we have almost always found successful after general and local bleedings, and purging. The excision of small portions of the inflamed conjunctiva immediately around the cornea by means of a pair of delicate forceps and curved scissors, we have found exceedingly beneficial in allaying the inflammation almost instantly, and suspending the increasing opacity of the cornea. Success in these cases depends entirely upon the free and rapid extraction of blood from the turgid vessels, which having lost their continuity, were no longer able to convey a redundancy of blood to the inflamed cornea.

Our author very properly condemns astringent and stimulating collyria, and advises the use of tepid fomentations, until the excitement begins to abate, when cold and moderately astringent washes are to be applied.

The second chapter describes the following species of conjunctival inflammation, viz. *Catarrhal Inflammation*, *Strumous Inflammation*, *Purulent Inflammation*, *and Gonor-*

rhœal Inflammation. This part of the book yields to no other, both as it regards the importance and frequent occurrence of the diseases enumerated in it, as well as the very able descriptions which are given of them. The distinctions are extremely precise and correct, and the remedial precepts founded upon them, are a strong evidence of the author's profound knowledge and skill. Most surgeons treat all the above species of ophthalmia pretty much in the same way; and indeed very few ever think it necessary to descend to such minutiæ; but we apprehend that most of them, after perusing our author's remarks attentively, will allow the necessity of separating the various species, and of applying a different treatment to each, according to its own peculiar nature. The almost general neglect of care in the treatment of conjunctival inflammation, has doomed many of our fellow beings to total blindness, and rendered many curable cases, entirely unmanageable.

Catarrhal inflammation of the eyes is thus characterized. "The disease commences, most commonly, with a sensation of itching, or burning and stiffness in the borders of the eye-lids. The eye is dry and less moveable in its socket. On examining the conjunctiva, we shall find the redness unequally diffused over its surface, and the vessels running in distinct bundles, or fasciculi across the eye. That the inflammation is seated in the conjunctiva, and not in the sclerotica, is evident from the size of these vessels, from their being more deeply coloured, and from their lying more superficially. They swell and subside again more rapidly, than those of the sclerotica. In the motions of the eye itself, they remain stationary, but when the eye-lids are moved, they are observed to follow.

"It is this particular enlargement of the conjunctival vessels, that causes the sensation, as if grains of sand, or other extraneous matter were lodged upon the eye.

"The disease, like all other species of catarrh, has its exacerbations in the evening; and this is sufficient to distin-

guish it from the strumous ophthalmia, especially in children, which is generally worse through the day, and remits at night.

" It is generally connected too, with inflammation of some of the mucous membranes, and like those when violent is ushered in with fever. The inflammation in some cases, extends externally over the integuments, and the skin is excoriated from the very acrid secretions, which are constantly overflowing it. At the end of four or five days, a mucous or puriform secretion takes place from the lids. It is the thin tender membrane which this forms over the cornea, that causes the patient, in this stage of the disease, to see all objects as enveloped in a mist; if he looks at the candle by night, he sees it but dimly, or as surrounded by a circular zone or iris. Pustules of matter likewise, scarcely visible to the naked eye, form along the margin of the eye-lids, or on some part of the conjunctiva, which bursting, pour forth their contents with the other secretions. Some of these contain nothing but yellow serum; others are filled with a more purulent-like fluid. Both kinds are often dissipated by proper management; most commonly they burst, and discharging their contents, leave behind them small superficial ulcers. These vesicles, which are probably nothing more than the inflamed mucous glands of the conjunctiva, are very analogous to the aphthæ which are so frequently met with in the cavity of the mouth, on the lips, tongue, and other mucous membranes of the body. Professor Himly remarks, at a time when aphthæ of the throat were very frequent at Brunswick, he also found many vesicles, beginning with an inflammation of the sclerotic coat; sometimes the cornea was similarly affected."* 10.

" In the *treatment* of this species of inflammation the most mild antiphlogistic plan, will be sufficient; and this should never be carried to the extent of debilitating the patient, as in some of the other varieties of ophthalmia. A single

* Vid. *Loder's Journal.* Vol. i.

bleeding, followed by the application of a few leeches to the lower lid, will in general subdue the disease. Where the inflammation is slight, nothing more is necessary, than to direct the patient to wash his eye frequently through the day, with a little cool spring water, or some weak astringent lotion. If, in addition to this, the patient confine himself to a dry and cool atmosphere, and a moderate diet, avoiding all spirituous liquors, he may frequently extinguish the disease completely in its origin, or at any rate allay very much the subsequent puriform discharge.

"In the second stage, or where the puriform secretion is already established, great benefit will be derived from a solution of the lapis divinus,* anointing the lids at the same time, with some astringent or stimulating ointment. When the disease approaches to a chronic state, the palpebræ may be scarified with much advantage, and the strength of the ointment somewhat increased. It will be advisable to exhibit, at the same time, some of the lighter tonics, as the mineral acids, &c. Like all other affections of the mucous membranes, the disease, when cured, is extremely liable to relapse, and when it subsides into this chronic state, to become very obstinate and intractable. Care must be taken on this account, to avoid all such causes, as may in any manner conduce to bring about such a relapse.

"Mr. Ware has particularly recommended the vinous tincture of opium,† in this affection; but I see no advantage it possesses over other stimulants." 14.

* This is an old formula of St. Yves, employed very generally by Professor Beer, in diseases of the eye. It is prepared in the following manner.

R. Nitri depurati,
Vitriol cœrul.
Aluminis crud. aa. Unc. viij. contrita et mixta, fluant in crucibulo, quibus sub finem adde camphoræ tritæ, unc. semis rite agitata refrigerantur.

† The preparation employed by Mr. Ware, was that of the London Pharmacopœia of the year 1746. It is decidedly preferable to any of the other preparations of opium in the various kinds of ophthalmia. Its formula is the following:

Strumous Ophthalmia. The second species treated of may be easily known by the numerous symptoms peculiar to it, which are presented to us in a striking point of view in the following description.

"The following are its chief characteristics. The eye-lids, particularly the upper, are much swollen and red, generally half closed, more especially if the eye be directed towards the light. The patient can no longer move them, and any effort of the surgeon made to separate them causes the muscles of the face to be thrown into violent action. If the patient be an adult, and can exert sufficient resolution to open his eyes, it will be observed, that he depresses at the same time the lower jaw. He seeks out the darkest recesses of his room, and is never easy, except when removed from the light. If a child, he buries his eyes in the pillow of his bed, or in the lap of his mother, to screen them from the ordinary light of day.

"A quantity of acrid, pungent tears are constantly distilling from the half separated eye-lids, which falling over the cheek, produce an uneasy sensation of scalding and itching, and cause the patient to be continually rubbing his eyes. Sometimes the lachrymal sac and canals are also affected, and a similar discharge takes place from the nares, excoriating the lip and alæ of the nose.

"Some little address is required in opening the eyes of the patient, in order to examine them. Children, in general, oppose most obstinately every effort of the surgeon, made with this view; and it is in vain to offer mild persuasion, or hold out any reward to gain their compliance. The best mode of proceeding, is, to place the head of the

R. Opii colati Unc. j.
Cinnamoni
Caryophyllar. arom. aa Dr. semis
Vin. alb. Hispan. Libr. semis.

Macera per hebdomadam sine calore, deinde per chartam cola. One twentieth part of the spirit of wine may be added to this mixture to prevent it from spoiling.

child between the knees of the surgeon, who is seated. Carrying the fore-finger of his right hand over the orbit, the skin of the superior palpebra should be embraced with its point, and gently raised. This should be managed very skilfully, or the tarsus will be everted. The lower lid can be depressed in the same manner, with the fore-finger of the other hand.

"On examining the eye itself, we shall perceive throughout the conjunctiva, a diffused and unequal redness, the vessels running in distinct fasciculi or bundles, as so many radii of a circle towards the cornea. The most of these terminate on the circumference of this latter tunic; a few continue even to its centre, and others do not pass beyond the sclerotica. These become more and more developed in the progress of the disease, and at the end of each, there appears a phlyctenula, or small pustule, which bursting, pours forth its contents, and is converted into an open ulcer.

"In a still higher grade of the disease, the vessels of the conjunctiva overshoot the margin of the cornea, and advance in radii to its very centre; the cornea, or rather conjunctiva, which covers it, is seen of a reddish brown colour, swollen and thickened, presenting more the appearance of a muscular and fleshy texture, than that of a membrane. The iris and pupil are entirely concealed, and the vision is completely obscured. Some authors suppose that the cornea is really inflamed under these circumstances; hence they have given to this appearance, the name of Corneitis. Professor Beer, who looks upon it as a mere thickening of the conjunctiva, terms it with much more propriety, *pannus*.

"One of the peculiar characteristics of strumous ophthalmia, is that it is entirely unaccompanied with pain. The same fact is observed with respect to scrofulous inflammation, when seated in other parts of the body. It is every where marked by a dulness of sensibility, and the pain, in comparison with that attendant upon the other varieties of inflammation, is always very slight.

"Strumous ophthalmia is, moreover, characterized, as we

have already noticed, by great intolerance of light. This, to be sure, is a common symptom in all inflammations of the eye; but in this, it is constantly the most predominant. Some endeavour to account for this symptom, by supposing the retina to be affected; but if this were the case, we should, in all likelihood, find the vision much impaired, after the removal of the inflammation, which seldom or never happens. Mr. Travers is disposed to consider this morbid irritability, as dependant upon the state of the alimentary canal, with which it sympathizes; and this opinion will not appear altogether without foundation, when we reflect how often this affection is accompanied with derangement in the primæ viæ, as sordes, worms, &c.

"This intolerance of light is generally a source of much anxiety and alarm to the parents, who regard it as a most dangerous symptom; but I have seen it continue for months, without any evil consequence; and as long as the cornea continues clear and transparent, no danger is to be apprehended.

"In the *treatment* of strumous ophthalmia, it is scarcely ever necessary to resort to severe antiphlogistic means; blood-letting and purges being in general unnecessary, or acting, indeed, injuriously. Our chief indication should be directed to restoring the secretions of the body, which are all more or less impaired; and to fulfil this indication, nothing will be found more efficacious, than the liquor ammoniæ acetatis, combined with the vinum antimonii; to which may be added, when it is exhibited to children, a small quantity of the syrup of poppies. Sometimes small doses of the ipecacuanha comp. will answer very well; or where the intention is to excite an action at the same time upon the bowels and cutaneous pores, calomel and opium in divided doses, will be found preferable. Where the cornea is opaque, the calomel or blue pill may be given to the extent of slightly affecting the system.* Local applications

* Dr. Benedict, of Breslaw, is in the habit of giving one grain of calomel combined with a little sugar, two or three times in the day, with the most

are, in general, of little service. Where the disease, however, is accompanied with violent contractions of the orbicular muscles, (*blepharo-spasmus*) much relief will be afforded by fumigations with laudanum in boiling water. The same effect is produced by warm poultices of crumbs of bread and laudanum, or fomentations of poppy-heads, hemlock, cicuta, &c.

"It is very important to attend to the dietetic treatment; and the greatest attention should be paid to the nutrition of the patient, to air, exercise, &c. His chamber should be large, well ventilated, and nearly obscured. It is always better to exclude the light from the eye in this manner, than by bandages enveloped close around the organ, which are always hurtful. There is no remedy so useful in allaying that morbid sensibility to light, so harassing in this species of ophthalmia, as a blister behind the ears, or to the nape of the neck; and this should be kept discharging for several days, or if necessary, repeated. Issues and setons are attended with similar good effects.

"If the disease do not yield to this plan of treatment, recourse should be had to tonics. The best of these, perhaps, are the mineral acids, which may be given to children in an infusion of roses. A solution of the oxymuriate of mercury, given in the dose of one-sixteenth of a grain, three times daily, is a favourite tonic with many of the most eminent English surgeons. Sedatives and tonics combined, have sometimes a very excellent effect; as the extract of bark with the humulus. To these should be added, the employment of mildly stimulating ointments, or astringent

happy effect. He has continued its use, he remarks, for four or five weeks, without any unpleasant consequences. He advises, at the same time, the administration of the Liquor Cor. Cer. in the following form:

R. Liq. cor. cerv. Dr. ij.
Aq. anis. Unc. ij.
Syrup. simpl. Unc. j. M.

One or two teaspoonfuls to be taken four times, daily. Vid. *Beitrage fur Praktische Medicin und Ophthalmiatrik.* Leipzig, 1812.

collyria; but above all, the occasional use of the sea or shower bath.

"The *pannus*, which is left behind on the subsidence of the inflammation, readily yields in its recent stage to the employment of stimulating or slightly escharotic applications, as the introduction, once or twice daily, of the laudan. liquid. either alone or combined with æther. In the more chronic stage of the complaint, it will be necessary to have recourse to scarification of the part, or excision of the larger trunks supplying the pannus; together with blisters or issues to the back of the ears or nape of the neck." 17.

Purulent Ophthalmia is particularly obnoxious to young children, and often proves to be a very obstinate disease. Our author has considered this part of his subject profoundly, and favoured us with much sound reasoning and valuable advice upon its origin, character, and treatment, and pointed out the affinity it bears to the Egyptian ophthalmia. The whole subject is so intimately linked together, and its several parts so dependent upon each other, that we regret we cannot furnish any extracts. It will be read with great interest for the valuable information which it contains.

Gonorrhœal Ophthalmia is a disease of very doubtful existence with many excellent surgeons; but our author believes that such a form of conjunctival inflammation may exist, although he acknowledges that it is of very rare occurrence, since he has never seen a case of it, notwithstanding he visited for several years, the principal eye-infirmaries and hospitals of Europe. The cases, communicated to the medical world by Swediaur, Beer, Scarpa, and Vetch, have induced him to give it a place in his work, accompanied by a very excellent description and much philosophical reasoning. This disease is perfectly similar to the preceding, and differs from it only in its cause.

The third chapter is engrossed by an excellent description of *Rheumatic Ophthalmia*, so called from its succeeding, and sometimes alternating with general or partial rheumatism. The sclerotica is the original and principal seat of

the disease, which selects it in common with the other fibrous parts of the body, for its attacks. The following is a part of the symptomatology of the disease, as laid down by our author.

"The disease generally commences with a deep, lancinating, or acute pain of the orbit, now and then confined to the eye-brow, but most commonly extending over the whole of the side of the head, which is affected. This pain is rendered worse at night, when the patient is covered warmly in bed; and very often one or more of the joints are affected at the same time. Sometimes, general rheumatism or pains in the limbs have preceded the inflammation in the eye, which are mitigated, or cease entirely as soon as the disease is once firmly established in the latter organ. With the first sensation of pain in the eye, there will be found more or less redness of the sclerotica, epiphora, and intolerance of light. The redness is to be distinguished from that which takes place, when the conjunctiva is the seat of inflammation, from its being of a lively carmine or rose colour, from its being diffused over the whole sclerotica, and from its being more deeply situated. There is a constant weeping of the eye, more particularly when it is subjected to sudden vicissitudes of temperature, or exposed to a damp and cold atmosphere. Hence this variety of ophthalmia has been termed by the older nosologists, the *ophthalmia humida.*

"These symptoms, if not controlled by art, are every day increased. The redness of the eye becomes greater, extending itself to the vessels of the conjunctiva, which may be seen of a florid red colour, and covering the more delicate rose-like capillaries of the sclerotica. The pain is rendered more severe, affecting not only the cranium, but the whole head and face.

"The cornea, or rather the conjunctiva covering this tunic, participates in the inflammation. It is observed to lose its transparency, and assume a dull horny appearance. Small vesicles or phlyctenulæ form on various parts of this membrane, which bursting, pour forth their contents, and leave

behind as many superficial ulcers, which seldom or never, however, extend deep into the cornea. If the constitution be otherwise healthy, they most commonly disappear with the other symptoms of redness, pain, &c. leaving in general little or no opacity, or any further trace of their having once existed, than some slight and almost imperceptible excavations or foveæ of the cornea, which, however, disappear altogether in the course of a very little time.

"When the disease is permitted to run its course, the inflammation spreads to the iris, the vessels of the sclerotica are seen to take on the beautiful rose coloured zone peculiar to iritis, the iris loses its irritability and becomes sluggish, its colour is changed to a greenish hue. The pupil is irregular, angular, and contracted. There is effusion of coagulable lymph in the pupil, which considerably impairs the patient's vision, and small brownish condylomata are seen to arise at the same time upon the iris." 44.

A perfect diagnostic of this species of ophthalmia must be obtained, as upon it rests the whole of the treatment, which differs materially in many respects from the other forms.

"*Cure.* When the disease is violent, accompanied with a tense and hard pulse, it will be necessary in the first stage to have recourse to venesection. This may be aided by cupping, or leeches applied to the temples. The division or opening of the temporal artery, as uniting the advantages of local with general depletion, has been highly recommended in this species of ophthalmia; but is now very generally abandoned, as it is constantly followed by an aggravation of the disease. Mr. Vetch has very satisfactorily accounted for this in the power which arteries possess of rapidly accommodating themselves to the exigency of the part which they supply.*

"As this ophthalmia is in general accompanied with some affection of the stomach, or alimentary canal, it is advisable

* Op. citat. p. 39.

in most cases to follow the bleeding by an emetic, or to empty the bowels by some active cathartic. To these should succeed the employment of antimonials, given in small quantities, so as to keep up a constant nausea, and determine towards the skin. They are more especially advantageous, where the disease has originated from exposure to cold, or where the functions of the skin have been suddenly suppressed.

"Mr. Wardrop* has used, with considerable advantage, small doses of bark, in rheumatic ophthalmia, and considers it to possess as specific an effect in this disease as in ague. The practice, from the greater violence of inflammatory affections in this country, is scarcely admissible.

"The pain in this disease is best alleviated by blisters applied behind the ears, or to the nape of the neck; warm fomentations of poppy heads, hyosciamus, &c. contribute to the same effect. Where the pain is extremely violent, and accompanied with a sensation of tension or constriction of the globe, relief is frequently obtained, by evacuating the aqueous humour, in the manner proposed by Mr. Wardrop.

"Unctuous or fluid applications to the eye, are seldom of much benefit, excepting in the latter stage of the inflammation. The most useful of these, are the vinous tincture of opium, or Sydenham's tincture, streaked once or twice daily, by means of a delicate camel-hair pencil into the eye." 48.

In the fourth chapter, Dr. Frick describes *Iritis* in general, and then divides it into the *Idiopathic*, *Syphilitic*, and *Gouty Iritis*. In this part of the work, uncommon precision and judgment are displayed; the distinguishing signs of the three species of the disease are very accurately noted, which is all-important, for a correct diagnostic, and consequently for a proper mode of cure, it being obvious that the latter must vary very materially, according to the peculiar nature

* *Medico-Chirurgical Transactions*, vol. x.

of each affection. The following extracts, from our author's remarks upon the three species of iritis, are very valuable, and will enable the reader to judge, how far he has succeeded in this part of his undertaking.

"*Iritis Idiopathica.* This commences with an obtuse, deep seated pain in the eye, causing a sensation as if the ball were constantly pressed upon from without; the pupil, at the same time, is seen to be contracted; still, however, maintaining its circular form and central position in the eye; the motions of the iris are less free, and the eye is more sensible to light. The iris is next observed to change its colour, becoming sometimes of a reddish, but more commonly of a greenish hue. More frequently, this change is confined to a small segment of this membrane; sometimes the inner ring alone is affected, whilst the outer preserves its natural appearance. As soon as this alteration of colour affects the outer circle, the iris swells, its margin becomes puckered, loses its acuteness, and appears as turned back towards the posterior chamber.

"With the contraction and immobility of the iris there is always more or less indistinctness of vision, caused from the inflammation having spread to the adjacent parts, or the effusion of coagulating lymph into the pupil. The pain becomes more violent, extending even to the brain, and the slightest motion of the head is sufficient to excite the most severe paroxysm. The redness of the eye is very inconsiderable, and bears no proportion at all to the vehemence of the other symptoms." 52.

"*Iritis Syphilitica.* The first symptom we have of this affection, is a pale redness of the sclerotica, but which in a short time extends to the conjunctiva. The cornea is equally and uniformly obscured, the iris is less irritable, the pupil contracted, and no longer occupies its central position, but is drawn inward and upward toward the root of the nose. It loses its circular form, and becomes more or less angular. As in the other species of iritis, the iris swells, and loosing its natural colour changes to a greenish or redish hue.

"All these changes in the state of the iris, are accompanied with more or less intolerance of light, with painful irritability of the whole eye, and with a considerable degree of epiphora. The patient complains of a severe lancinating pain in the eye-brow, darting into the socket of the eye and brain. This commonly comes on towards evening, continues to increase till midnight, then gradually abates, until about four or five in the morning, when it entirely ceases.

"After each of these nightly attacks, the pupil is found more and more contracted, and drawn further towards the inner canthus, the iris more altered in form and colour, and the quantity of coagulating lymph effused from the iris, increased. This lymph becomes organized, so that with a delicate microscope, and often indeed with the naked eye, small vessels may be seen, like slender brownish fibres, or in the form of a membranous web, stretching from the pupillary margin of the iris to the capsule of the lens.

"Where the disease is permitted to run its course uncontrolled, there will be seen to arise from the border of the iris small reddish warts or tubercles, having a spongy appearance; and when examined by the microscope, are found to bear a great analogy in structure to those condylomata, termed *crysta galli*, which commonly make their appearance upon the anus or perineum. These condylomata increase very rapidly in size, so as to fill up the anterior chamber, and press backward the iris. Lardy looking ulcers appear sometimes upon the cornea, sclerotica, or even the integuments of the eye-lids." 56.

"*Iritis Arthritica.* The arthritic inflammation, so strikingly resembles the syphilitic, that the two diseases are often confounded, and when they co-exist, as they sometimes do, in the same individual, the diagnosis is rendered extremely difficult.

"This species of inflammation is generally preceded by some unusual sensation about the eye, or its vicinity, as the creeping of insects, or a peculiar tingling about the orbit, which is followed by a violent racking pain in the organ,

darting towards the temples and cheeks. A discharge of acrid pungent tears takes place from the eye, whenever the lids are separated. The sclerotica appears of a rose-red, particularly around the cornea, forming a similar zone of vessels, to that described under the head of syphilitic iritis. In this, however, the inflammation is not propagated to the very margin of the cornea, as in the other varieties, but leaves immediately around its edge, a narrow bluish ring, which becomes more perceptible with the increasing vascularity of the conjunctiva. This ring, and the subsequent tendency to varicosity in the vessels of the conjunctiva, are characteristic features of arthritic iritis, and serve to distinguish it from the syphilitic. The pain is inconstant, and increased by every change of temperature, and particularly by the warmth of a bed.

"The changes which take place in the iris, differ according as the disease attacks persons of a meagre irritable habit, or as it appears in individuals of a gross constitution, with lax fibre, and little irritability. In the first class of patients, the iris becomes expanded and immoveable, loses its colour first in the less, then in the greater ring, the pupil is rendered angular or irregular, contracts more and more after each attack of pain, and is traversed by a number of minute fibres, which consist of coagulating lymph effused from the iris. A perfect web is formed throughout the pupil, and the vision is completely destroyed. The disease never reaches this grade, without being accompanied with general fever; and if left to itself, the eye becomes atrophic, and retracts within the orbit.

"In the second order of patients, these symptoms are somewhat modified. The iris is more contracted, the pupil is not dilated uniformly, but acquires an oval or oblong shape. The pupillary margin of the iris, projects backward towards the lens, so that nothing of the smaller circle of this membrane is perceptible. The pains now increase, and the vitreous humour becomes affected, presenting a greyish green appearance or opacity, at the bottom of the eye.

The lens is soon affected in like manner, exhibits a sea-green colour, swells, and appears to project forward into the anterior chamber, giving rise to the *cataracta viridis*, or what is better denominated by Professor Beer, *cataracta glaucomatosa*. During these changes, the attacks of pain are rendered more violent and continued, and the varicose state of the eye increases. The cornea having lost its lustre, appears as if completely dead, and the vision is totally destroyed." 58.

"TREATMENT. In the treatment of these several species of iritis, we are governed by the same general principles, which regulate the treatment of inflammation in other parts of the system; and the importance of the organ affected, and the rapid progress of the disease, require the greatest vigilance and decision on the part of the practitioner. In the *idiopathic iritis*, which most commonly attacks the robust and full blooded, immediate recourse should be had to a full and free bleeding, which may be repeated again in a day or two, if the inflammation continue violent, or the symptoms of general fever are not moderated. This should be followed by the exhibition of a brisk and active cathartic, repeated as occasion may require, and small doses of tartarized antimony, so as to keep up a constant state of nausea. In this manner the disease is often immediately arrested. If, notwithstanding the free use of the lancet, the symptoms still continue violent, local bleeding may be substituted for the general; cupping-glasses to the temples will in general prove more beneficial than leeches. Blisters to the back of the ear, or nape of the neck, are seldom found to answer any useful purpose in iritis, as in the other species of ophthalmia. The violence of the pain is often mitigated by fomentations of the eye with water, as hot as the patient can bear them; or what is preferable, a strong infusion of poppy water.

"Our next object in the treatment of iritis, should be the removal of the effused lymph behind the pupil; and this is best effected by the different preparations of mercury. Calo-

mel combined with opium or the Dover's powder is, perhaps, the best form in which it can be administered. Frictions to the eye-brow, with a little mercurial ointment and opium, seem to contribute to the same effect.

"Another and very important indication in the treatment of this affection, is to prevent the contraction of the iris, and its consequent union in this state to the capsule of the lens. This is best answered, by dropping into the eye, once or twice daily, a weak solution of the extract of belladonna, or hyosciamus, or by rubbing upon the eye-lids and brow, a small quantity of the same extract, thinned to the consistency of cream. Professor Beer censures very much the indiscriminate employment of these narcotics to the eye, and thinks them only admissible, after the symptoms of inflammation have been in a great measure subdued. He supposes they have a strong tendency, not only to weaken the powers of the retina, but of the iris itself. Such effects have, no doubt, been known to follow the employment of these substances, but it is only when the remedy has been carried to great excess; where they are judiciously and properly applied, there can be no objection to their use. How these act in producing this dilatation of the pupil, is not sufficiently made out. Mr. Saunders* is of opinion, that they have some "specific influence in exciting a contraction of the radiated fibres of the iris." It is more reasonable, perhaps, to suppose, that they operate by inducing a state of palsy in the nerves to which they are immediately applied; which state is communicated by sympathy to those nerves, likewise, which supply the iris. A similar state of dilatation and paralysis of this membrane, is a constant attendant upon pressure of the brain, as we see manifested in hydrocephalus; or the same effect may be perceived in the last moments of expiring life.

"As to the treatment of *syphilitic iritis*, it is evident, that we cannot expect any radical cure of the disease, as long

* *A Treatise on some Practical Points relating to Diseases of the Eye*, p. 68.

as there is any taint in the system of the constitutional affection; for the slightest exposure to the causes enumerated, must excite a recurrence of the complaint. The great danger in this species of inflammation, arises from the lymphatic effusion in the pupil and the contraction of the iris, which follow those nightly attacks of pain, so peculiar to this disease. The most effectual mode of arresting these symptoms, is to direct the patient to rub into the eye-brows each night, and a short time before the pain is expected to come on, a small quantity of mercurial ointment, united with a portion of finely powdered opium. If the pain be not allayed by the first rubbing in of the ointment, it may be repeated every fifteen minutes, or half hour. I have known as many as ten or a dozen frictions in a night; most commonly two or three suffice. In the first stage of the disease, nothing more should be applied to the eye, than a warm fold or compress of linen; it is only in the second stage that recourse should be had to fluid or astringent applications. Of these, a weak solution of corrosive sublimate, with mucilage and opium, the red precipitate ointment, and where foul looking ulcers are present upon the cornea, a solution of the lapis divinus will be found most beneficial.

"The *constitutional* treatment of this disease is regulated by the same principles, which guide us in the practice of other venereal affections. Calomel, perhaps, is the best preparation of mercury, we can apply in iritis. I have seldom seen a case in which it failed to cure. As soon as the mercurial action is excited, or a fœtor is discovered in the breath, the most favourable changes will also be observed to take place in the condition of the eye. The zone of vessels surrounding the cornea, becomes of a paler red, the cornea regains its transparency, the quantity of lymph effused into the posterior chamber is diminished, and the vision hourly improves. The peculiar idiosyncrasy of some persons, in whom the mercury produces tormina and griping, will sometimes prevent its free exhibition. These effects may be obviated, in some measure, by giving, on alternate days, small

doses of any laxative medicines, as the sulphate of magnesia, &c. Where the disease attacks persons previously debilitated by the free use of ardent spirits, the use or abuse of mercury, by age, or where it is combined with scrofula, it most generally proves destructive to the vision, as the strength of such patients is not sufficient to withstand the action of our remedy. These cases are most difficult to manage, and usually terminate in complete amaurosis.

"The cure of *arthritic iritis*, like that of gout, is a subject still of much obscurity. It is seldom necessary in this species of ophthalmia, to have recourse to general bleeding, as in the idiopathic iritis, the application of a few leeches to the eye, being in general sufficient. To prevent the nightly attacks of pain, frictions of mercurial ointment and opium, or of this latter substance, with the saliva, should be employed to the brow, and the warm aromatic compress worn through the day. The vinum colchici has been resorted to with a similar view, and found very beneficial in several cases; but the virtues of this remedy remain to be tested by further observation.

"The preparations of mercury are seldom of much efficacy in arthritic iritis; most commonly they are found to increase the pain and febrile irritation. Blisters behind the ears, or to the nape of the neck, or frictions with the tartar emetic ointment, should never be neglected." 61.

The fifth chapter contains a good account of *ophthalmia interna*, to which the reader will please to refer.

Part Second, treats of the diseases that attack the individual textures of the eye. The following affections are considered in the first three chapters, viz. *Winged film*, or *Pterygium*, *Tumors and Excrescences of the Conjunctiva*, *Opacities and Specks of the Cornea*, *Ulcers of the Cornea*, *Staphyloma of the Cornea*, *Conical Cornea*, *Mydriasis*, *Myosis*, *Synechia Anterior and Posterior*, *Prolapsus of the Iris*, *and Artificial Pupil.* To notice all the above marked changes would far exceed the limits prescribed to us. We shall therefore content ourselves with a single extract upon the

important subject of artificial pupil. At the same time we would recommend our readers to study the whole article attentively, as it yields to none in importance or merit.

"Various modes have been recommended and adopted for performing this operation; but I shall notice the most important only. Scarpa's is after the following manner. The patient being seated and secured as for the operation of cataract, a couching needle, not quite so large as that in common use, is made to pierce the sclerotica, about two lines from its union with the cornea. When the point has reached the upper and internal part of the border of the iris, it is thrust into this membrane, at a small distance from the ciliary ligament, until it is just perceptible in the anterior chamber. This step of the operation requires attention, as this part of the chamber is very narrow, and the instrument may become entangled in the cornea, which lies close upon the iris. The surgeon is then to press, with the needle, the iris from above downwards, and from the internal towards the external angle of the eye, so as to detach a portion of its border from the ciliary ligament. When this is obtained the point of the instrument must be depressed, so as to rest upon the inferior angle of the wound, which may be rendered as large as necessary, by drawing the iris towards the temple. If the pupil then be found clear, the needle is withdrawn; but should there remain any portion of the opaque lens, or its capsule obstructing the orifice, it is to be broken down, and brought into the anterior chamber for absorption.

"Scarpa,* from the late edition of his work, appears to have relinquished this mode of operating, as he has found by experience, 'that the newly formed *oval* pupil becomes in process of time, *filiform*, and consequently useless.' After noticing the various modes practised by Donegana, Flajani, Adams, Gibson, Beer, and others, he seems disposed to prefer the method of Maunoir.

* *A Treatise on the Principal Diseases of the Eye*, by A. Scarpa; translated by James Briggs, London, 1818.

"Schmidt,* instead of piercing the sclerotica, in the manner of Scarpa, and entering the iris from behind, made a section of the cornea with a lancet shaped knife, opposite that where he intended his artificial pupil; and introducing a small hook or pair of forceps, seized upon the iris near its ciliary border, and tore it from its attachments. It is proper to remark, however, that he practised this mode only when the cornea was quite transparent and healthy; in other cases his operation was little different from that of Scarpa; excepting that his needle was slightly curved at the point, the better to enable him to seize upon the iris.

"Assalini,† after noticing the successive improvements this operation has undergone, suggests another of his own, not entirely unexceptionable. Having made a section of the cornea, he introduces a species of forceps, the one extremity of which being pointed, is easily made to pierce the iris. The apices of this instrument are dentated, and made to close most accurately, so that having laid hold of the iris he was able to detach it with the greatest facility from the ciliary ligament.

"Professor Beer has now in a great measure abandoned the practice of coretodyalysis detailed in his work, and adopted that recommended by Reissinger, which consists in strangulating the iris with a double hooked forceps, between the edges of the cornea. The operation must be begun near the outer edge of the cornea, and if possible three lines distant from that part of the iris which is to be separated. The incision of the cornea is best made by the lancet shaped knife, and should never exceed three lines in length, or the prolapsed part cannot be sufficiently strangulated. The double hooked forceps, closed, (Fig. 2,) is now introduced through the opening of the cornea, carried forward in a parallel direction to the iris, and with the points downwards, till it reaches as near as possible the ciliary edge of

* Vid. *Opthalmologische Bibliothek.* Band II. St. 1.

† *Ricerche sulle pupille artificiali.* Milano, 1811.

the iris. The forceps are then to be turned, that the points of the hooks may be directed towards the iris, and the blades slightly opened, are sunk into the iris. The surgeon now closes the forceps again, at the same time that he draws them towards the opening of the cornea, and gently and easily disengages the iris. In this manner, a considerable part of this membrane will be separated, which is brought through the wound of the cornea, and left to unite with the cicatrix; producing thus a species of prolapsus iridis. Where the iris shows any disposition to retract, and the first or second effort is not sufficient to retain it between the edges of the wound, it will be proper to cut off the part of the iris which has been separated, thus uniting coretodyalysis with corectomia.

"The instruments of Langenbeck, Græfe, Emden, Wagner, &c. are little more than modifications of that of Reissinger. Emden* asks, whether so delicate an operation should be undertaken through the cornea or sclerotica. He thinks the danger arising from the latter mode, has been much overrated, and suggests the question, whether the improvements made in operating *per corneam* cannot be transferred to the operation *per scleroticam*. After a number of experiments, performed with this view on the eyes of brute animals, he invented for this purpose, what he terms his *Raphian-kistron*.

"It is hardly necessary to state, that in all cases where it is practicable, the pupil should be made on the side near the nose; because less squinting is occasioned, when performed in this direction, than in any other. In some instances, however, where the cornea is opaque in this half, no choice is left us, and we are compelled to practise the operation upon the upper or external part." 116.

Chapter 4th, is dedicated to *Amaurosis*. We have read this article with great satisfaction and improvement. It

* *De Raphionkistro, novo instrumento ad coromorphoseos methodum perficiendum, &c.* 1818.

should be read as a whole, and we therefore refer the reader to the book itself.

Chapter 5th, contains a full and perfect account of *Cataract* in general, its various species, and the mode of cure, including the different operations most in repute. The general symptoms of cataract are there laid down.

"The cataract is usually of very slow formation, and in its incipient stage is easily confounded with amaurosis. Professor Beer has pointed out the following diagnostic marks, by which the two diseases are in most cases very easily distinguished. In *cataract*, all objects, especially white ones, appear to the patient involved in a thin dirty mist or cloud; the decrease of the vision is in an exact ratio to the visible opacity behind the pupil. This opacity is first observed in the centre, seldom in the border of the pupil. As the dimness increases, a blackish ring is seen around the margin of the pupil caused by the shadow of the iris reflected upon the lens. This ring is always more conspicuous in light than dark coloured eyes. The opacity commencing most commonly in the centre, the vision of those objects immediately opposed to the eye, is first obstructed, whilst those viewed laterally are seen with tolerable distinctness; hence the patient sees better in the twilight, when the pupil is dilated, than in the bright glare of day, and his vision is considerably aided by the use of convex glasses. The flame of a candle appears to the cataractous patient, surrounded by a whitish circle, which widens as he retires from the light; in the more advanced stage of the disease, he no longer sees the flame, and can merely judge of the distance at which it is situated. The incipient cataract does not affect the motions of the iris." 147.

To distinguish incipient cataract from amaurosis, Dr. F. draws a parallel between the symptoms of each disease; this enables us to form a certain diagnostic with great facility. Of the great variety of cataracts, he particularly directs his attention to the consideration of the *hard*, *gelatinous*, *milky*, and *membranous cataract*. For a minute and accurate de-

scription of these different forms of cataract, the reader will consult the work, which will abundantly compensate him for his trouble. Dr. Frick insists with much earnestness, upon the necessity of ascertaining, whether the cataract be complicated with any affection of the general system, or derangement of the other parts of the eye, before we form our prognosis. He expresses himself thus, respecting the complications we most generally have to encounter:

"A more important distinction, and one which it becomes every surgeon to attend to, before forming his prognosis, is the state of simplicity or complication of the cataract. The disease is termed simple, when it is accompanied with no other morbid alteration of the organ of vision, which can affect its functions, or no complaint of the general system; and complicated, when there is superadded to the opacity of the lens or its capsule, some other local or general affection." 158.

"Cataract is sometimes complicated with *glaucoma*; and this is readily distinguished by its peculiar sea-green colour. The lens is enormously enlarged, projecting without the pupil into the anterior chamber, the iris is sluggish, the pupil very much dilated and drawn, as it were, towards the inner canthus, the patient is completely blind, the whole eye is varicose, and very hard to the feel. The disease is accompanied throughout its progress, with violent and incessant pain of the head.

"*Amaurosis* is not unfrequently combined with cataract. A widely dilated pupil and immoveable iris, were at one time looked upon as infallible criteria of this complication; but these symptoms are often caused by nothing more than the mechanical pressure exerted by the lens, and are by no means constant and necessary symptoms of amaurosis. If, however, there be connected with these appearances of the iris, evident atrophy of the eye, or if the patient be unable any longer to distinguish light from darkness,* we may

* "The surgeon should be cautioned, however, never to rely in any instance, for this information, upon the simple *ipse dixit* of his patient, but

pronounce with certainty, there is amaurosis. The diagnosis is more difficult where the latter commences, when the cataract is already mature, and the difficulty is increased, where the patient is unable to give a distinct account of the origin and progress of his complaint. Pain in the orbit or neighbouring parts, should always excite our suspicion, as cataract is generally unaccompanied with any particular pain. The same may be said of the sensation of tension or pressure, which the patient sometimes experiences towards the root of the nose, or in the supra-orbitary ridge.

"Other local complications with cataract, are much more readily distinguished. Such are, *staphyloma*, *hydrophthalmia*, *leucoma*, *ulcers of the cornea*, *pterygium*, *psorophthalmia*, and the various species of inflammation.

"Cataract may be complicated with some more general affection. It is not unfrequently associated with gout, scrofula, syphilis, herpes, &c. and in some of these cases, we may very much retard and often arrest the disease in the lens, by the usual remedies for these complaints." 159.

Surgeons of great respectability differ in opinion, with regard to the propriety of performing the operation for cataract, when one eye only is affected. Our author has contented himself with merely stating the arguments on both sides, without throwing his opinion into either scale. It is certainly a matter of much importance to be settled, and we should undoubtedly have some general rule for our government in such cases. Experience has not, as yet, thrown much light upon the subject, a fact, that alone seems to denounce the propriety of interfering in all cases of the kind, for we should certainly have possessed extensive information upon this point, if the afflicted had not heretofore

to examine most scrupulously for himself. Ask a person labouring under blindness from cataract, or any other cause, whether he has any sensation of light, and he will answer most unequivocally, 'No! I am stone-blind.' Yet direct this same individual to fix his eye upon the window, the fire, or any luminous object, and intercept the rays of light, by moving the hand, or any opaque body between the eye and object, and he can distinctly tell you."

wisely considered one eye as good as two, and therefore been unwilling to jeopardize a good eye, merely for the chance of recovering very doubtful, and surely very imperfect vision in a bad one. When both eyes have cataracts, we are to operate upon one only, or both according to circumstances.

"If both eyes be affected with cataract, and every thing promises a favourable result, the operation may be performed upon both at the same time; when, on the other hand, there is any circumstance present which could render the issue at all doubtful, or there is danger of much subsequent inflammation, it is better to operate on one eye only, and wait until this has perfectly recovered, before making any attempt upon the other." 169.

There are several modes of performing the operation for cataract; those now in general use are, extraction, couching or depression, and breaking up of the lens. These different modes, together with some useful alterations, which have been suggested and put into practice, by oculists of high standing, are minutely described in the work before us, and the cases of which the one is to be selected in preference to the others, are laid down with considerable exactness and clearness. His description of extraction and couching, is commendable. Every step of each stage of the operations, is minutely detailed, and nothing appears to be omitted which could have made this part of our author's work more complete and valuable.

In chapter 6th, we have an account of the diseases of the humors of the eye, among which *Glaucoma*, *Solution of the vitreous humor*, *and Dropsy of the eye*, are particularly interesting.

The 3d part of the work treats of the numerous affections of the eye-lids, and lachrymal organs. The reader's attention is particularly directed to his descriptions of the following diseases, viz. *Inversion and Eversion of the lids*, *Distichiasis*, *Inflammation and Scirrhus of the lachrymal*

gland, Epiphora, Pure and Strumous inflammation of the lachrymal Sac, Fistulæ, Relaxation and Dropsy of the Sac.

The 4th and last part of the work treats of the diseases which attack the ball of the eye, some of which, when combined with constitutional symptoms, prove occasionally destructive to vision and to life. *Soft Cancer, Strabismus, Myopia, Presbyopia, Phthisis bulbi and Corneæ, Varicose state of the ball,* and *Protrusion of the eye-ball,* are generally noticed and well described. Of these diseases our time will permit us but the notice of a single one. Protrusion of the eye-ball depends, according to our author, on the following causes.

"Encysted tumors forming at the bottom or sides of the orbit, most commonly give rise to exophthalmos. These tumours are in every respect analogous to those which occur in the cellular structure of other parts of the body, and contain for the most part a fatty or oleaginous matter; occasionally they are filled with a glutinous fluid not unlike the white of an egg, and in some cases they are seen to contain a limpid or sanious matter. Exophthalmos may be occasioned likewise, by a collection of pus or hydatids in the orbit, by exostosis of the bones adjacent to the eye-ball. The disease is frequently caused by fungous tumours arising in the antrum maxillare, the nasal fossæ or frontal sinuses, which in their progress destroy the orbitary plates, and enter the socket. Professor Langenbeck of Goettingen, relates a case of exophthalmos which was caused by a large hydatid that had formed in the frontal sinus, and which was cured by perforating the outer table, and removing the hydatid."* 315.

Messrs. Dalrymple and Travers have related, in the Medico-Chirurgical Transactions, the history of two very interesting cases of this disease which were caused by anastomosing aneurism of the orbit. The deep pulsation felt when the tumour was pressed upon, and the vibratory thrill

* Vid. *Neue Bibliothek fur die Chirurgie u. Ophthalmologie.* II. Band. p. 247. Hanover, 1820.

imparted to the fingers, made known the important nature of the affection. Both cases were cured by tying the carotid artery of the side affected. A highly interesting case of protrusion of the eye-ball, recently came under our own notice. The subject was a black man about thirty-five years of age; his disease had been standing for nearly three years, and the eye was so much protruded, as to present considerable deformity. He complained of deep-seated, and violent pain over the orbit, which was increased to an almost insupportable degree upon any excitement of the system; the vision although defective was not lost, and the globe of the eye being much extruded, was not only impeded in its natural motions, but left nearly uncovered by the lids. Careful examination left no doubt as to the nature of the disease, and that the only remedy which the case afforded, was the extirpation of the eye, and with it the tumour, the growth of which was now daily more evident. After much hesitation on the part of the patient, forced by the acuteness of his sufferings, he consented, and the operation was performed—the eye with the tumour was extirpated from the socket —but the unfortunate patient, instead of having his sufferings alleviated, found only an aggravation of them, and shortly after died. The post mortem examination discovered the remarkable fact, that a very inconsiderable portion of the tumour had been removed, for having in the progress of its growth, caused the absorption of the thin orbitar plate of the frontal bone, it had continued to increase within the cavity of the cranium to a considerable extent, bearing up before it the left anterior lobe of the cerebrum. With the exception, that the vision on the diseased side was somewhat affected, this man retained the entire possession of all his faculties.

We cannot take leave of the book under our notice, without offering the humble tribute of our thanks to the author for the benefits which he has conferred on the profession generally, by presenting them with a volume of great value and utility, and one which was much wanted. As a manual

of the diseases of the eye, we believe it to be the best which has been published. It contains all the improvements which have enriched ophthalmic surgery, in such a surprising degree, within a few years past; and the author has spared no pains to make his work a valuable treasure, for study as well as reference, thereby rendering it equally useful, both for the practitioner and the student. A.

ART. XIV. *Essays on various subjects connected with Midwifery.* By WILLIAM P. DEWEES, M.D. Mem. Amer. Phil. Soc., Mem. Philad. Med. Soc., Mem. Academy of Med. &c. Philadelphia. Carey and Lea. 1823. pp. 497.

IT is with much gratification that we took up the above volume to review it. Tired of systematic compilations, of American editions of English books, and of the hasty literature of which medicine in our country produces too much, we congratulated ourselves with a feeling of satisfaction to our national pride, as well as the profession, on the appearance of an original work of sterling merit, and of unquestioned title to be classed among the productions of our country. We naturally expect, when Dr. Dewees is announced as an author, to peruse something at once valuable to practical men, and calculated to advance the literary respectability of our science;—elucidations drawn from experience, useful opinions and precedents for difficult cases, with a style and an execution which distinguishes a man of literature.

This expectation, in the present work is in a great measure realized; nor do the essays in it fall short of the author's established reputation; though our pleasure is a little damped by discovering that they are all republications. We have not time, in the hasty way in which these pages are written, to discover where all are to be found; but they were inserted in different medical journals, and one of them,

an essay on puerperal convulsions, in twenty-seven pages, in the 1st vol. of the Recorder. One hundred and fifty-four pages consist of reviews, which, though they contain much valuable matter, we shall not attempt to criticise. Far be it from us to lessen by such a course, the awful respect which is owed to the reviewing tribe; or to display any of their arcana to the rude gaze of the public. We are too deeply interested to betray the mysteries; and though the Doctor has made known the authorship of these, we still do not consider them fair subjects for analysis or criticism. The laws of periodical writing, in mercy to mankind, ordain that one reviewer shall not review another; else what a flood might not infest the world! We shall, however, make a few observations, currente calamo, upon them, and then proceed to the other papers contained in the volume.

The first is a discussion, in fifteen pages, of the correctness of the opinions of Dr. Osburn, as expressed in the introduction to his essay on laborious parturition, upon the subject of the physical necessity of pain and difficulty in the parturition of our species. It is interesting; and we confess ourselves of Dr. Dewees's opinion. Warm climates seem most natural to man. It is in them that he reaches the height of perfection in his physical organization, and with least injury from the climate. Here it is, therefore, that we should look for the most *natural* state of parturition; and it is without material pain. Dr. D. in speaking of Italy, quotes Swinburne, and the supposed forgery of Brydone. He might have employed the better and more general evidence of Humboldt. We must here explain that we mean an uniformly warm climate, such as our newly liberated friends of the late Spanish colonies enjoy; not that destructive alternation of heat and cold, which lays waste the most southern extremity of the United States. We are well acquainted also with the perfection which man attains in colder climates; but this is acclimation, and the extraordinary developement of intellect occasionally witnessed there, is well known to be too frequently at the expense of the ani-

mal powers. We should never forget, among the triumphs of our white-complexioned race, that the cradles of civilization, were the climates of Egypt, India and China; and that it has always been arms rather than arts, which have given the preponderance to the northern world; a preponderance which may yet go farther north than we could wish.

Next are some comments on section I. and II. of Dr. Denman's aphorisms; in which, though generally correct in point of fact, we think Dr. Dewees unnecessarily and censurably severe; most of the errors he reprobates being mere verbal inaccuracies. These, though worthy of blame, are too common in medical works to justify making them of so much importance.

Further along, in two places, are about 36 pages of reply to Dr. Peachy Harrison, in defence of the author's theory of impregnation and superfœtation against the attacks of that gentleman. This, in our opinion, is the least valuable part of the volume; and we regret that the more select matter should be dilated into a larger bulk by its addition. However necessary and proper it might have been to answer Dr. Harrison's papers at the time they were made public, it was a pity to incorporate them in a work designed, we presume, for permanent use, and whose character in other respects, is that of more importance. Drs. D. and H. seem to have settled it between them that nature is a "coy maid." We were of a different opinion, and always supposed that nature was a matron,—"a mother kind alike to all." As, however, it is a question belonging peculiarly to this branch of the profession, we presume we must be in error, and are perfectly ready to give up our judgment to gentlemen of greater age and experience than ourselves.

A comment is given in p. 92 to 100, on Burns's account of the processes carried on in the fallopian tubes and uterus, at a very early period after conception. We have not time to refer to Burns's history of the gravid uterus, but we are converts at present to Dr. D.'s opinion,—that there can be no data by which to judge, as Mr. Burns undertakes to do,

of the precise positions in which the ovum enters the uterus, and that the shaggy lining of the first inch of these tubes is at least improbable. This last, however, is a question which can only be settled by dissection; and in this point the eminent anatomist has the advantage of our experienced practitioner.

At p. 178 is a reply to a paper by Mr. Fogo, in the Edinburgh Medical and Surgical Journal; in which our author combats, successfully in our opinion, the views of the latter gentleman. These tend to considering the uterus as a very passive organ, and unimportant to the rest of the system; and represent the menstrual secretion as the mere result of the plethora of the blood-vessels.

"Plethora is so unimportant to the menstrual evacuation, that this very condition is, in many instances, perhaps chargeable with a suppression of it. This is conformable to the opinions of many authors on this subject,* and has been many times confirmed by our own experience. And we may here advance, without fear of error, that the blood which is capable of maintaining the general system, however small that quantity may be, will be sufficient to enable the uterus to produce the catamenial flow, provided this viscus has no other evil to contend with than scarcity of blood. And that, when this flux is interrupted by chronic disease, as phthisis, obstructed liver, scrofula, &c. it is not owing to the want of blood, but to an interruption being given to the sympathies that excite this secretion." 187.

P. 291 to 337 are a series of strictures upon the opinions of Dr. Merriman respecting retroversion of the uterus and extra-uterine conception. As these however depend closely upon and arise out of the preceding paper on retroversion, we shall postpone them till we treat of the other.

From p. 461 to the end, is occupied with a reply to Charles Bell's paper on the muscularity of the uterus; in which Dr. D. controverts several points believed in by the latter writer,

* Riverius, Ettmuller, &c. Friend's Emmenol, p. 38.

particularly with reference to the existence of a muscle described by Mr. Bell, as entering into the substance of the uterus, and covering its fundus, and then converging to be inserted into the round ligaments. The action of such a muscle would be well understood, and would explain some of the phenomena of labour-pains, such as their extending in the track of these ligaments to the thigh. This is, however, a point to be determined exclusively by dissection; no other evidence being fit to enter into comparison with this: and as Dr. Dewees does not appear to have taken that course for settling it, it can hardly be granted to him. Such processes of reasoning are, however, useful; as, if one portion of physicians do not sufficiently refer to facts in these inquiries, it may with equal truth be said that some patient investigators of nature do not derive nor communicate to the public all the advantages which they might obtain, were they to admit of longer chains of inferences from their observations. Another point in this last essay, however, is of a very different kind; being an inference of Mr. Bell's in favour of making a small incision in the cæsarean operation, and introducing the hand and extracting the fœtus by *boring* and distention. We consider the propriety of this at least very questionable; though the question may at least remain whether a smaller aperture than that at present employed might not suffice, and the delivery of the child be trusted at least in part to the distensibility of the womb. The wound would thus be rendered smaller in an internal part where stitches cannot be applied; and its closure could perhaps be more confidently relied on. We will not, however, undertake to express an opinion on the cæsarean operation; a critical and delicate task, only to be judged of by the few who in addition to particular study have dissected with a reference to it, and the still fewer who have seen it performed.

We have thus run over the part of the work which consists particularly of observations on the writings of others. There remain those which are original, in which we shall be more analytical.

The first of these independent essays is on the subject of su-

perfœtation. Several pages are occupied with a preliminary view of the process of generation. Dr. Dewees believes that the semen is absorbed by the vagina and frequently by the vulva, and then transmitted to the ovaries. This he supposes to take place by means of a set of absorbents destined to this particular purpose, and extending from the vagina to the ovaries; similar to the duct asserted to have been discovered in the cow. We never felt any difficulty, theoretically, in admitting the existence of superfœtation, upon the commonly received views of generation; excepting that which supposed the semen to be obliged to enter the uterus. The only cause which we imagined to operate against it, was the probable incapacity of the genital system to commence afresh so important and extraordinary an operation as the production of a new individual, while another was already in existence, and required its support. We always considered it a question of evidence, and felt no right to doubt the statements of those who asserted that they had witnessed the occurrence of the phenomenon.

Dr. Dewees gives us an account of two cases, in one of which, a lady, several hours after the birth of a fine healthy boy, was delivered of a fœtus, in its membranes entire.

"Upon opening the membranes, an embryo of between three and four months presented itself, looking fresh and almost transparent; the funis large, white, and shining; the placenta healthy and entire; the blood on its maternal surface rather florid, a proof it had not long been detached from the uterus; the waters clear, abundant and gelatinous; in a word, every thing looked as though the child had just parted with life. Those who are in the habit of seeing abortions, very readily distinguish between those which have just been deprived of life, and those which have parted with it a long time; this bore every mark of freshness. I was therefore much struck with its singularity.

"The following considerations will, I think, establish beyond doubt that it was a case of superfœtation:

"First, the absence of hæmorrhagy during the whole pe-

riod of gestation; which would not have been the case, had the placenta been any time detached before the period of labour.

"Secondly, the ovum having nothing in common with the full-grown fœtus; on the contrary, it had its own membranes, water, placenta, &c.

"Thirdly, the fresh and sound appearance of the ovum.

"Fourthly, its having maintained its attachment to the uterus, after the birth of the other child." 21.

The other case is of a white woman who was delivered of twins; the one white, the other "*perfectly black.*" Each of these strongly resembled a man of the corresponding colour who had been acquainted with her, lived in the neighbourhood, and ran away when it was discovered that the girl was with child. We should have expected the one of African descent, to be a mulatto, as we cannot well imagine a white woman, to have a child "*perfectly black.*"

Three very clear and strong cases are given at p. 57, &c. in which bleeding nearly or quite ad deliquium was followed by the happiest effects, on rigidity of the os externum. In all the three, the same circumstances occurred,—viz. extreme constriction of the vaginal orifice from previous injury, a labour already extended to a considerable number of hours, and a general advancement of it in every respect but the circumstance alluded to: and the result of the bleeding was the same. One of them had used the tobacco injection per anum twice, and with a severe affection of the system from its exhibition, but without advantage. Some observations on bleeding to fainting, which Dr. D. has subjoined in a note, are of such high practical importance and intrinsic usefulness, though frequently not attended to, that we shall extract them.

"I have therefore always placed my patients on their feet when practicable, before I opened the vein. We may also spare ourselves a great deal of trouble, and our patients much anxiety, in cases of tedious labour from the unwillingness of the soft parts to dilate, where this disposi-

tion to syncope from the loss of a few ounces of blood when in an erect posture obtains, by taking advantage of this peculiarity. Few women object to being bled during labour, nay, they for the most part think it indispensable when the labour has been protracted. The consent, therefore, of the patient and her friends is easily obtained; all we have to do is, to conceal from them our wish to have her become faint. Should she faint we can readily satisfy them, by calling to their recollection, it is common to her from bleeding, and that it will be useful to her. In this way, we can very often shorten a labour many hours, when we might not be able to obtain the consent of our patient, or we ourselves think it necessary, to bleed her to the extent of forty or fifty ounces."

Next, is an account of a case in which a healthy-looking child, born in a rapid labour, met with difficulty of respiration; and the pulsations of his umbilical cord continued for six hours and a half. Three or four minutes elapsed without respiration commencing; when, his lungs being inflated, a slow and irregular respiration continued, accompanied with a peculiar croaking noise; the placenta remaining attached, both to child and mother. "The child sometimes breathing pretty freely for a minute or two, and then appearing to be much oppressed and in pain—respiration would now be entirely suspended from ten to thirty seconds; the child during this time would writhe its little body as if much pained, its face would become livid and the pulsation in the funis would be much augmented; after this kind of struggling would subside, it would appear pale and lifeless as though it had fainted." The placenta was felt at its attachment, and no flooding took place. At length the circulation gradually subsided, and life was at an end; and the placenta was then found separated. This curious case gives rise to many reflections. Dr. D. argues, that the uterus was in a state of torpor or inelasticity, for the whole or the greater part of the time, as the placenta was not thrown off; whence he infers that the *tonic* contraction of the uterus may be with

safety suspended for a long time, if the placenta remain attached, and that hæmorrhage takes place, as is commonly supposed, only from the place of attachment of that substance. As the labour-pains did not recur till after the discharge of the placenta, he infers that they depend on the *tonic* contraction for their existence. From the total exposure of the cord to the atmospheric influence, and the regular continuance of the circulation, he draws a conclusion against cold, as a cause of the suspension of circulation, in presentations where this body prolapses; and lastly, he attributes the gradual subsidence of pulsation in this case, to the uterus in an equally gradual manner recovering its tone, and compressing the placenta.

The next is the essay on premature births, at the seventh and eighth months. Dr. Dewees assumes as a fact from history, that more children survive, of those born at the seventh, than at the eighth month; and then attempts very ingeniously to explain it. He conceives that the circumstance of an unusual distention in the neck of the uterus, which takes place at the former of these periods, renders it much more likely in itself, that premature labour should then commence than at any subsequent time.

"Three causes co-operate to this end; first, the contractile power of the fundus and body will rather be weakened from long distention, and in some measure from their becoming accustomed to its stimulus; secondly, this stimulus being rather diminished now, since the ovum does not increase as rapidly as formerly, and no more room being allowed for that increase by the augmentation of the neck; and thirdly, the neck being now less passive; for as it is forced to develope, or to augment in width, it becomes incorporated with the body and acts with it, so that when contraction is excited, all the fibres act at one and the same time, and such is the nature of this contraction at the eighth month and at after periods, that it tends to shut the mouth of the uterus; and hence we see at this period very few spontaneous premature births." 70.

Hence, if abortion take place at the eighth month, it is more likely to be the result of violence; which will, of course, diminish the child's probability of life. Dr. D. considers the smaller developement and size of the child as disadvantages of less importance; and mentions some cases of very early fœtuses having been preserved; particularly that of Fortunius Licetus, who was an abortion of the fifth month, "no bigger than the palm of one's hand," and who afterwards became a man of learning, and an author, and nearly reached the age of fourscore. The impropriety of carelessly rejecting diminutive births is censured, and the preservation of the above remarkable instances, is insisted on as an example.

We have next a case of ruptured uterus, from a sharp bony projection on one of the ossa pubis; with remarks.* The conclusion drawn, is in favour of an occasional resort both to delivery per vias naturales, and to the cæsarean operation, and in other instances of leaving the unfortunate patient undisturbed. It is not important here to extract from the paper more minutely.

The *case of alteration of the colour of the hair during parturition*, occurred during violent convulsions, which lasted nearly twelve hours, and were relieved by four bleedings to the amount of 50 ounces. The hair anterior to the corneal suture became almost completely white. In four or five days it nearly regained its natural colour; but continued to retain a lighter shade, to the date of the last account.

In the next essay, the utility of the volatile tincture of guaiacum is strongly insisted on, in painful and obstructed menstruation. In the first of these, its use, as is well known from the former recommendations of our author, is best adapted to those cases which are accompanied with the presence of a membrane in the cavity of the uterus. In obstructions of this discharge, Dr. D. very rationally distinguishes between amenorrhœa from colds near the menstrual

* Our readers will recollect the case of Mr. Bell, alluded to by Dr. Warfield, in our number for July. The cause is similar.

period, that from fevers without visceral obstruction, and those cases in which it is merely sympathetic of phthisis pulmonalis, scirrhous liver, or derangement of other important parts of the body. In the former of these cases, Dr. D. tells us that in the experience of two and thirty years, it has *never* failed him. The great value of this medicine in these complaints is now very generally known; but it can do no harm to reiterate the praise of so valuable an addition to the materials of cure. It is right to multiply copies of formulæ which have met with unusual success; and we therefore insert it.

℞	Gum. guaiac. - -	℥viij.	
	Carbonat. sodæ vel potassæ.	ʒiij.	
	P. piment. - - -	ʒij.	
	Alcohol. dilut. - -	lbij.	Digere.

The volatile spirit of sal ammoniac to be added, pro re nata, in the proportion of a drachm to every 4 ounces of the tincture; or less or more according to the state of the system.

We should conceive, from the extremely small proportion of ammonia above directed, that the composition hardly deserved the name of a volatile tincture at all; especially when we compare it with the strength of the ammoniated alcohol commonly employed. We have been in the habit, for some years, of using the common volatile tincture, with better success than any other emmenagogue; but not so universally so as our author describes. The next paper is upon the partial and concealed inversion of the uterus; the same subject which is agitated in the inaugural thesis of Dr. Drayton. This case occurs without any external protrusion; the concealment being within the vagina. Of course it is perceived on a manual examination. The indications are to return it if possible, and if this cannot be done, to relieve it from a distressing and dangerous strangulation, by complete eversion, drawing it quite through the os uteri.

"This disease may be suspected when the following circumstances obtain; first, where we find the placenta very bulky and firm at the os externum soon after the expulsion of the

child, and that it gives more than ordinary resistance to delivery when it is attempted by an exertion at the cord: secondly, when we have applied as much force as the cord ought to bear when the placenta is thus low in the vagina, and we do not find it advance; if the patient complain of much pain from this exertion; and, more especially, when we attempt to aid the force applied at the cord, by hooking the placenta with a finger, we still find it give uncommon resistance: thirdly, when the patient complains of much pain, has some hæmorrhage, is very faint, has cold sweats, and becomes extremely pale, more especially when this paleness cannot be accounted for from the quantity of discharge. Under these circumstances, we ought to desist from all attempts to deliver the placenta, until we examine whether the fundus be not prolapsed with this mass." 139.

The practical directions are valuable, but we have not space for more.

The eight pages on dysmenorrhœa, contain a view of the author's opinions on the subject of the inflammatory membrane, or false tunica decidua, which he esteems the universal cause of that complaint. He considers it as resulting from a vicious state of the menstrual discharge; the coagulating lymph of this fluid not being deprived of the peculiarity from which it takes its name, as is usually effected by the *secretory* process through which it passes. This then in the form of a membrane, acts as a foreign body, and is expelled by labour pains.

The essay on rupture of the uterus, contains a general view of the conditions of this terrible accident; a useful kind of writing enough, but not the best adapted to furnish novelty for analytical reviews. The principal peculiarity in it, is an attempt to prove that the peritoneum not unfrequently remains uninjured after this accident, and that this greatly diminishes the danger. In the case of Dr. Bell, in the 1st vol. of the Medical Commentaries, there is much to confirm the idea of Dr. Dewees, that the bones and other remains of the fœtus, which were discharged from a rent at

the navel, were contained in a preternatural sac. No post mortem examinations were afforded, as the woman recovered. In that of Dr. Sims in vol. 8. of the Medical Facts, this circumstance was ascertained to exist. In both these cases, the fœtus, after what was obviously a rupture of the uterus, was found in a cavity which did not communicate with the intestines. When the fœtus is really thrown loose among the intestines, the violence done to the constitution is very great; and death generally soon occurs. A case copied from the Journal de Med. for 1780, in which life, under these circumstances, was prolonged for about 5 months, with symptoms of great violence, and in many points different from those described above. We think it is at least rendered very probable, that the continuity of the peritoneum is thus preserved; but it is difficult to imagine, how this circumstance is to be primarliy discovered. When the rupture occurs in or near the vagina, the distention of the wound is in general very great, and we are to presume the laceration of this membrane is pretty certain. Dr. D. does not mention any instance, in which this uninjured state of the peritoneum was ascertained by manual examination, nor does he tell us how to distinguish it. The circumstance should, however, be undoubtedly allowed its weight in forming general rules and principles for our guidance.

A table, somewhat confused, is drawn out, enumerating the different cases in which this accident may occur; and rules are given for them separately. Dr. D. is an advocate for using manual assistance wherever it is not mechanically forbidden, and the woman is alive. The following view from the collections of Dr. Douglass, will give part of the grounds for this conclusion; together with the fact that, as Dr. Dewees has found, more cases have recovered where delivery has been effected than where they have been left to the powers of unassisted nature; notwithstanding "a vastly greater number of women have been suffered to remain without an attempt to deliver them after the child has passed into the cavity of the abdomen, than have been deliver-

ed; consequently the proportions not being equal, the [contrary] inference must be incorrect."

"We shall first give those cases where delivery had taken place; and then will follow those where the women died without being delivered.

	Lived after delivery.
La Motte's first case, - - -	3 days
second case, - -	4
Garthshore's, - - - -	23
Peu's - - - - -	8
Steidele's, - - - - -	7
Dewees's - - - - -	5 hours
James's - - - - -	a few minutes
Douglass's - - - -	17 hours

Cases undelivered, with their periods.

Monroe's case, - - -	2 days after rupture
Garthshores's (as quoted by Douglass, p. 35 of Essay,) -	2 days after rupture
Pouteau's - - - -	36 hours probably*
Saviard's, - - - -	but a few hours probably
Denman's - - -	16 hours probably
Smellie's - - - -	14 hours
Hooper's - - - -	12 hours
Chatard's - - - -	4 days, or as many hours; there is great uncertainty in this case; most probable but a few hours." 227.

The first class thus average 5 days and about 18 hours; of the second about 1 day 10 hours; a very striking difference indeed.

"In cases like VII. where *a.* is combined with either *b.* or *c.* or where the pelvis is much deformed, so as to preclude the possibility of a child at full term to pass alive; and whether the uterus be contracted or flaccid, there is but

* I have put probably to several, as the hours are not exactly mentioned.

one alternative either for mother or child, and that is the Cæsarean section. We are aware that the crotchet may be recommended in these cases, but with what prospect of success? None certainly to the child, for that must necessarily fall a victim; and what is the chance for the mother? We believe none whatever—for the force that would be requisite to open the head, and the extreme difficulty to extract it, if that could be accomplished, would exhaust the woman, and she would most probably expire before the delivery were effected." 259.

Of this terrible and rare operation, few American physicians will undertake to judge; as it so seldom occurs, that scarce any one has ever seen it performed. The splendid success of Dr. M'Dowell in extirpating the ovaria, will however serve as an encouragement. What adds to the terror of such a resort in the circumstance before us, is that the "occasio præceps" of the philosophic Greek exists in this case to a higher degree than in almost any that can occur; and the young practitioner may be called upon to decide this great question, and perform the hazardous and uncommon operation to which it leads, without either the concurrence of a consultation, the preparation of the mind of the patient and her friends, or more than a few minutes delay.

The two next of the more laboured papers are upon the retroversion of the uterus. Our city readers will remember a short-lived "Academy of Medicine," which rose, went into action and fell in a few months, with a truly meteoric rapidity. Like a meteor too, its short existence was not spent without the diffusion of some light. It might have said, with the Roman, "non omnis moriar." Its "pars melior" which survives consists of a public opinion on the subject of yellow-fever, which assisted much in quieting the minds of our citizens during a late alarm, and in some good papers to which it gave rise, which have since been published in the periodical journals. One of these is the first of the two papers before us; the second, on the opinions of Dr.

Merriman, being a continuation of it. We shall review them together.

Dr. D. first gives a general description and history of the disease. Though principally found to occur between the second and fourth months of pregnancy, it may take place in the unimpregnated state; and our author, in consultation with Dr. Gallaher, once saw it between the sixth and seventh months. This was in a case of retarded developement of the ovum, from phthisis pulmonalis. The author proposes the introduction of a long probe or catheter, into the os uteri, to distinguish between this affection and an extra-uterine fœtus situated between the rectum and vagina. He censures Dr. Denman for attributing the retroversion of the uterus to be a previously existing suppression of urine as a cause. His language is here not very close and pointed; but we understand him to believe that this is only occasionally the case, and that the urinary obstruction is always an effect and very frequently nothing else. He mentions cases of its occurrence from violence;—he has seen it in three instances almost instantly produced, by a severe blow across the back while stooping, by attempting to lift a heavy tub of clothes, and by an effort to jump over a fence while pursued by a bull. It is obvious that in at least two of these cases, it was owing to the action of the abdominal muscles, and to this our author frequently refers it. There seems, in fact, one reason why this effect may not be as easily produced by this cause, as prolapsus or hernia.

Our author next comments on Dr. Denman's theory, as leading him to set so slight an importance upon this accident. He remarks that most of the histories of fatal cases from this cause, are in the British isles; and intimates a natural suspicion that it is owing to the habit of considering its approach with a degree of indifference. The opinion that the restoration of the uterus to its natural situation was not absolutely necessary, combined with the fear of abortion from repeated and forcible attempts; and a belief of the power of nature to produce or at least to promote

this restoration by the gradual enlargement of the fœtus, appear to have been productive of much mischief by occasioning delay. Gangrene and consequent bursting of the bladder seem the most common termination. Abortion is the inevitable consequence of the continuance of the complaint, and of course must be accompanied with more distress from delay than attempts to relieve it.

"We shall only consider what the forces are which oppose the restoration of the fundus in our attempts to this end, and then point out what we think the best mode of overcoming them. First, a distended bladder. Second, an expanded rectum, and perhaps a loaded colon at its great flexture. Third, the counteracting efforts of the patient herself. Fourth, the too great bulk of the uterus." 283.

In opposing these our author has nothing remarkable, till we come to the third.

"The third obstacle we have to contend with, is the violent efforts that are induced to bear down; thus counteracting all our endeavours at reposition. This is perfectly involuntary, and is decidedly the greatest hindrance we have to contend with in ordinary cases; indeed it renders the most simple form of this complaint a case of some difficulty, and I have known it the only one to oppose us. In cases where the urine can be drawn off without difficulty, and the contents of the rectum discharged without much trouble, we may meet with such opposition from these involuntary efforts as either to foil us, or to render the reposition extremely difficult." 285.

Where the uterus has become so large that it cannot, by the simple application of pressure, be returned through the superior strait, three modes of practice occur: 1, to leave the case to nature; 2, to attempt diminishing the size of the uterus by perforating the membranes, through the os tincæ, so as to produce abortion; and 3, to produce the same effect by puncturing the uterus through its substance, from either the rectum or vagina, as recommended by Dr. Hunter. The second of these plans appears to be the preferable one,

where the situation of the os uteri will admit of the introduction of a catheter. This method was original with Dr. Dewees, and he long believed himself the first who had recommended and taught it; but he has lately learned that it was unsuccessfully attempted by Mr. White at the request of Mr. Hamilton; as also, at a late period, by M. Jourel. The third alternative, universally condemned by the British writers, was put in practice by the latter gentleman, in a case which, after two or three weeks of unpleasant symptoms, finally recovered.

In the next essay, in reply to Dr. Merriman, after observing that this writer copies the sentiments of Dr. Denman, our author proceeds to express his opinion of the total incompetency of the directions he gives for reducing a retroversion. He observes that the directions to "keep the bowels open and draw off the urine twice at least, or oftener during the twenty-four hours," are often difficult and sometimes impossible; and repeats that returning the uterus by the hand, which Dr. M. states is "not very objectionable," "provided it be done cautiously, and no force be made use of," but which he deems, "in general neither necessary nor advisable," is not only the principal means of relief, but much safer in the hand of a prudent operator, and less likely to produce abortion than neglecting to do it. It is impossible, we think, to peruse these articles without being convinced that Dr. Dewees has entirely the better of the discussion, and that the views of Drs. Denman and Merriman are erroneous and dangerous. We do not think our readers would be interested by going in detail over all the points in which Dr. Dewees criticizes the latter writer. They are principally on his explanations of the cases given by preceding writers. An instance is quoted from Dr. Merriman himself, in which after six days labour, and great distress and suffering, a putrid fœtus was squeezed through between the displaced uterus and the pubis, and the woman ultimately recovered. That this was, as Dr. M. thought it, a labour at the full time, Dr. Dewees very rationally doubts, for several rea-

sons, which we omit, excepting that the slight obstruction to the passage of the urine which did occur, did not take place till within the last two or three months, a period which will not accord with the well known observation that it takes place at or near the fourth month of gestation. The description is certainly far from affording an inviting picture of the consequences of leaving the case to nature.

Dr. Merriman quotes Deventer's account of what he calls a "posterior obliquity of the uterus;" and endeavours to show that it was a retroversion at the full time. "He says, 'I have found from experience that the womb may be too much resupinated, or incline with its fundus backwards, being forced against the backbone, so that its mouth or passage is not only raised too high into the abdomen, but is so obliquely situated, that its axis no longer corresponds with that of the vagina.'

"This account of the malposition of the uterus may be considered as a brief description of what Deventer considered a posterior obliquity of this viscus; and which Dr. M. endeavours to show is a retroversion at full period." 304.

This Dr. D. endeavours to prove is not a true retroversion. The remainder of this paper consists of a consideration, *seriatim*, of several cases quoted by Dr. Merriman, as being retroversions at the full time. They are, however, not of sufficient interest to our readers to be enumerated here. Dr. Dewees considers them to be so many cases of extra-uterine pregnancy.

The short paper which follows, in order, in the volume, is an account of a case in which the signs commonly considered as characterizing pregnancy, were unusually distinct; but where the young lady's character was irreproachable, and the symptoms ultimately proved to be owing to a mechanical retention of the menses within the cavity of the uterus, giving way, with a serous discharge, to the internal use of volatile tincture of guaiacum.

Of our author's long and masterly chapter, or rather monographic work on uterine hæmorrhage, which is the only

one remaining, our limits will not permit a full analysis. After an investigation, at considerable length, of the nature of the connexion between the uterus and ovum, and of the causes which may interrupt it, with which, though proper and necessary where it stands, we shall not detain our readers here, he proceeds to treat of "the periods of pregnancy at which hæmorrhage may take place." As a preliminary to this, he has furnished us with the following neat, and elegant recapitulation of the first of the above subjects, which in fact supersedes in utility the section at first appropriated to it.

"There is no period at which this may not take place, after the first month of pregnancy, since it is presumable, that after the fourth or fifth week, a union more or less strict is formed betwixt the ovum and the uterus by means of the chorion and decidua: it must therefore necessarily follow, that a separation may be effected, and a bleeding ensue. Until about the fourth, or between it and the fifth month of gestation, this accident may happen to any portion of the ovum, since up to this period, the placenta, or what is to become placenta, completely surrounds the ovum.*

"After this time, there is a portion of its surface that becomes transparent, and which uniformly augments in extent so long as the uterus continues to increase in capacity. This transparent portion is what is technically called the membranes; and towards the full completion of pregnancy they occupy a larger surface than the placenta, from which they appear to emanate. In consequence of this, there is a portion of the uterus from which no hæmorrhage can proceed,

"* We believe that the whole of the vascular covering, until the time above indicated arrives, is destined for, and converted into, placenta.—We do not believe any of these vessels become 'blighted,' (Burns' gravid uterus, p. 196) as it would seem to be a work of supererogation—and we believe further, that there is a point in every ovum from which the transparent portion of the membranes proceeds, and that that point is always opposite to the insertion of the cord into the placentary mass—this, however, is not the place for us to give our reasons for this belief, or we think we could satisfy [our readers] on this head."

so soon as this transparent portion shows itself—and this portion relatively increases as gestation progresses." 361.

"As a general rule, then, we find the risk from floodings in proportion to the advancement in pregnancy—because the vessels are larger, and will in a given time yield a much greater quantity of blood—though the chance of occurrence is in the earliest months." 362.

"We may farther observe, that it is frequently from neglect that any danger arises in the early stages of pregnancy—this inattention may proceed from the aversion that many women feel to let any thing be known that has any reference to their situation—from an ignorance of consequences, and from a long established opinion that a moderate discharge is useful, especially in plethoric women, &c. Time, of great consequence, is lost by this improper procrastination, and many an ovum has been cast off, attended with threatening hæmorrhage, which by early attention and proper care might have been preserved. Besides, the period of gestation has sometimes been permitted to lull the practitioner into dangerous security. Many of considerable experience maintain, that they have never seen danger from floodings before or at the period of three months. This is decidedly an error, and the sooner it is corrected the better. Whenever there is pregnancy with flooding there is danger—nor will the period of advancement, however short, protect of itself, against hazard. Of this, Mauriceau, La Motte, Gifford, &c. give us examples—and we may add, our own experience furnishes the same results." 362.

The classification Dr. D. adopts, is dependent on the period at which it occurs; and is into, 1. Hæmorrhage, while the ovum is still surrounded by a general connection of shaggy vessels between the chorion and the two deciduæ; which includes the first four or four and a half months of gestation; 2. All the remaining part of uterine gestation; 3. The period between the birth of the child and the delivery of the placenta; and 4. That following the discharge of the placenta.

First period—When a separation of the spongy membranes, followed by bleeding, occurs at the upper part of the uterus, the blood cannot be evacuated until it has increased its extent by opening a track down to the os tincæ, through a further separation; while, at the same time, its accumulation distends the uterus, and stimulates it to contraction. Hence, the great inconsistency between the real danger of a case and the visible bleeding. And hence, pain is a much worse and more alarming symptom than the simple effusion of blood. It is, however, impossible to distinguish these cases with any confidence by external symptoms; and the only safe rule, according to Dr. D., is to proceed in all cases, as if the ovum could be preserved. The author tells us that he has constantly acted on this principle, and has been frequently rewarded by success, when the case has been "truly a forlorn one." Little information is to be obtained from an examination of the os uteri; as the relaxation of this does not appear to be by any means a certain symptom. Mauriceau, Pasta, Dr. Rigby, and our author's own experience, are referred to in proof of this. The expulsion of clots proves nothing, as these are formed in the vagina, and are sometimes five or six times the size of the uterine cavity, even if it were not filled by the ovum. The quantity of blood is equally deceptive, from the reasons mentioned above. The idea of a *moderate discharge* being useful in renewing plethora is earnestly combated by our author; and he thinks that where the *legitimate catamenia return after impregnation*, in which he fully believes, as expressed in a note, the same fears should be entertained as in the slightest hæmorrhages. As he furnishes us with no grounds for the very uncommon opinion marked with italics, we cannot possibly judge of its accuracy.

The essential indications in the treatment are, 1. to arrest bleeding; 2. to relieve pain, and 3. to prevent the return of hæmorrhage. The precise methods we shall not here enumerate, as they are or ought to be sufficiently familiar; but shall reserve our pen until we meet with some valuable re-

mark which appears to be derived from Dr. Dewees's long experience. One of these occurs in the very same page over which we are glancing.

"The officiousness of nurses and of friends very frequently thwart the best directed measures of the physician, by an overweening desire to make the patient 'comfortable.' This consists in changing of clothes, 'putting the bed to rights,' or altering her position; all this should be strictly forbidden. Conversation should be prohibited the patient, and all unnecessary company excluded. Much mischief is frequently done by the injudicious talk of bystanders, who delight for the most part in the marvellous, and but too often relate the histories of cases which are every way calculated to appal the already but too much alarmed patient; this kind of gossipping should be peremptorily forbidden, even at the risk of giving offence, rather than permit it to the certain injury of the sick." 371.

The following observations on blood-letting are worthy of attention.

"Blood should be taken from the arm in a quantity proportionate to the exigency, remembering we do little or no good by the operation if we do not decidedly diminish the force of arterial action; let the pulse rather sink under the finger than otherwise; its repetition must be regulated by circumstances, recollecting, however, that hæmorrhage is sometimes maintained solely by exalted arterial action." 372.

As in fact we cannot fill up our paper in a better manner, we shall extract freely several passages of this character, without doing them the injustice of attempting to reduce them into our own language. The use of the plug,—we prefer the simple English term,—is thus described:

"To save even a few ounces of blood is a duty, and sometimes is highly important: should then the means just recommended fail in moderating or stopping the threatening symptoms, no time should be lost in employing the tampon. The best we have ever used is a piece of fine

sponge of sufficient size to fill the vagina. It should have pretty sharp vinegar squeezed from it several times with a view to cleansing of it, as also that it may be imbued with this acid; it should then be introduced into the vagina, and suffered to remain until its object is answered. 374.

"Whatever may be the rapidity of discharge in such cases, it is ever under command, so far as our experience will warrant the assertion, by the use of the tampon. It should be instantly resorted to, and its effects will be as quickly perceived. If the ovum can be preserved, we save a prodigious expenditure of blood: if we cannot, we not only do this, but obtain a most important truce, during which time nature achieves the separation and the final expulsion of the ovum, without the farther exhaustion of the patient. For Leroux tells us that when the uterus is opened the tampon is not only useful in stopping the discharge, but in stimulating the uterus to successful contraction." 375.

This humane and useful invention, not only thus affords time for the uterus to contract and prepare the ovum for a rapid expulsion, but where this action is proceeding, though too slowly of itself to save the blood, promotes and accelerates the process by the direct stimulus of distention.

"We deprecate with much earnestness, frequent and unnecessary touching. This is not only injurious by fatiguing the patient, but by removing coagula that may be important to the stopping of the hæmorrhage. This should therefore always be avoided, but at such times as it may become necessary to ascertain whether the mouth of the uterus be yielding to the influence of pain. It therefore can only be necessary in such cases as are or have been accompanied by uterine contractions. We also must seriously forbid all attempts to remove the ovum, so long as its great bulk is within the cavity of the womb, lest we break through its covering and evacuate the liquor amnii." "The embryo is expelled, and its involucrum is retained; the consequence is, that the flooding is by this means perpetuated, and much

pain and inconvenience, if not danger, is experienced before it is thrown from the uterus." 375.

Our author conceives that this operation, though recommended by Baudelocque, after the third month, should be rejected as dangerous and troublesome, and that pain and flooding should be trusted to opium and the "tampon;" and if no pain attend, the ovum may frequently be preserved. To extract the "*placenta*," (spongy membranes) where the fœtus is discharged separately, he uses a small crotchet or hook made of wire. In the second period, in which a transparent portion of the membranes exists, and in which only the remainder can begin to deserve the name of *placenta*; though hæmorrhage occurs with less frequency, this affection is liable to be much more copious and severe. High authority can be cited for trusting, 1. to internal and external medicinal applications; 2. to medicines and the "tampon;" and 3. to immediate delivery alone. Dr. Dewees places most confidence in the tampon, where its use is admitted, and of course is obliged frequently to the third course. Alum, lead, digitalis, cold, astringent injections, &c. are useful, as is well known in milder cases, and not without benefit in the worse kind, as is the case in hæmorrhages during the first stage. With alum our author has not been successful, doses sufficiently large deranging the stomach. Digitalis, so highly spoken of by Mr. Burns, Dr. D. has not tried, fearing its unmanageable character, and the permanent depression it is liable to produce. Lead he finds "a prompt, useful, and important auxiliary," which he "gives liberally and often with the most decided advantage," and which he "rarely fails to employ." We see no necessity for apologizing to "the delicacy of medical speculation, in calling its action *specific*." p. 887. This is not the age in which to deny "specific action" to any tribe of medicines.

"From two to three grains guarded with opium, may be given every half hour, hour, or less frequently, as circumstances may direct: or in case the stomach be irritable, a

very efficient mode of exhibiting it is per anum—twenty or thirty grains may be dissolved in a gill of water, to which will be added a drachm of laudanum: this must be repeated pro re nata." 373.

He never places reliance upon injections into the vagina, as he finds them inconvenient, uncomfortable, by wetting the patient, uncertain and transient in their effects, and often injurious by disturbing her, or by removing a useful coagulum.

To artificial attempts at delivery Dr. Dewees would only have recourse, when the mouth of the uterus was either dilated or dilatable.

Fainting he deems an unfavourable occurrence; contrary to some authorities. Cold he considers as operating only by diminishing the general force of circulation; and he disapproves, or doubts the advantage of a perseverance, when this purpose is answered. In sudden and alarming cases, he pours, we presume, cold water, from a height upon the abdomen. At the same time he constantly applies warmth to the legs and feet. Of cold substances introduced into the vagina and uterus, he has no experience.

Dr. Dewees describes a frequently repeated small flow of blood as preceding the full period by several weeks, and owing to the gradual development of the neck of the uterus, and the attachment of the placenta to it. With the better known hæmorrhage at or more near the full time, so well described by Dr. Rigby, we shall not detain our readers; and of the various cases, in which to attempt delivery, with directions for each, though an able system, and highly useful, we shall insert nothing but the remark that Dr. Dewees prefers, in all instances, searching for the edge of the placenta, in entering the uterus, to perforating it with the hand. This latter direction has always appeared repulsive to us. The directions for the operation are in a fine, practical style.

We should here, as in all other instances, wait for contraction of the uterus, before removing the body of the child; and the waters should be withdrawn, if possible, gradually.

We omit a discussion with Dr. Rigby, on the nature of the contraction of the uterine arteries; as our author himself concedes that it leads to no practical difference; and one gentleman has quite as good a right to amuse himself with speculations as another.

[In conformity with our original design, of presenting to the public a view of the Medical and Surgical Intelligence of Europe and America, we shall devote hereafter some pages of our Journal to a Review of the periodical works of this country; restricting ourselves, however, to such information as is entirely practical, or so intimately related with the science as to have an important influence upon its most necessary duties; we shall exhibit the progress of improvement in every quarter, and we hope render the Journal a still more valuable depository of useful knowledge.—Ed.]

Art. XV. *The Baltimore Philosophical Journal and Review.* By John B. Davidge, A.M. M.D. Professor of Anatomy in the University of Maryland. No. I. July, 1823.

"Personal and social courtesy have their value, but when the stern rules of philosophy, and the sacred obligations of science call on us, we may dispense with the courtesies of the drawing-room."—(p. 109 *of the above Journal.*)

The appearance of this Journal was long announced, and eagerly anticipated. We have read it with attention; but in vain have we sought for superior excellence, or extraordinary illumination in its pages. We do not conceive it to be so well suited to make us acquainted with what is, as with what has been in our profession, and a greater degree of solicitude to engage us in the merits of ancient disputations is manifested, than seems consistent with the character of a periodical journal. Nearly the whole of the work is the composition of the editor, who changes his name, though he does not vary his style, and discusses different topics, though always in the same spirit. *His own opinions*, *his own merits*, *his own discoveries*, constitute a grand centre around which

he revolves: to this point he always returns, however vigorous his step, however sublime his flight.

Notwithstanding the title, we should not willingly believe that this journal offers a fair sample of the medical literature, or the medical talent of "Baltimore." Indeed the pages of the Medical Recorder heretofore published will shew this very clearly, as a large number of excellent papers by Baltimore physicians may be found therein, offering a much more favourable view of the professional and literary character of that city. The pages of the Baltimore Journal are blemished by an unamiableness of temper, an arrogance of superiority, from which it is impossible not to shrink, with feeling for any mind subject to such emotions. Where the editor examines the opinions or evidence of others, he uniformly leans to the side of mistrust and suspicion, while he claims *for himself* an unbounded degree of credit, relative to what he has seen, published or said. Wherever he discovers the slightest fault or unintentional inaccuracy in others, he strives not only to convict them of error, but to render them ridiculous; and often impeaches their veracity, while endeavouring to expose them to contempt.

He is sometimes, moreover, inconsistent, in speaking of persons in a different manner *now*, from what he has done *in former* publications, on the same subjects, which induces us to be cautious in adopting his conclusions, lest we yield to the influence of his feelings, when we should be convinced by the correctness of his judgment. This is not to be mere assertion; the proof will be presently offered, as we advance with our review of the papers contained in the Journal.

The first paper, styled "a reference to the infirmary," is of a temporary and entirely local nature, and seems to have been provoked by some "scribblers" in the newspapers. We mention it merely to correct a mistake or misrepresentation, contained in the following words:

"In America, as yet, no association of a College for doc-

trine, and an Infirmary for practice, by relative position, internal structure and general economy, so as to enable them mutually to reciprocate their aid for the promotion of the contemplated objects of each other, evolves the important consequences of a combination and active concurrence of the two." 9.

We forbear any other remark on this extraordinary sentence, than to hint that the word "Baltimore," should be read for "America," unless the writer can shew that Philadelphia, Boston, New-York, and Lexington, are not within this country; in the three former of which, establishments for clinical instruction in physic and surgery, certainly have been long in operation, connected with the universities, and the importance of the combination thoroughly understood.

The second paper is a translation of a Treatise on Yellow Fever by Pouppé Desportes, with observations on the same disease; the principal object of which seems to be, to shew that Desportes was in the habit of bleeding and purging, and that Dr. Rush obtained his practice without *acknowledgment* from this "learned" Frenchman. We subjoin the following extract from the "Baltimore" Journal, p. 47.

"The question of success by the lancet, in subduing the yellow fever, is to be determined by the general authorities of experience, and not by the assertions of any particular writer. And for this purpose we have introduced the essay and cases of Desportes, and shall fortify them by the general experience of enlightened and ingenuous *practisers*, since the publication of this work.

"Dr. Rush, while writing on the introduction and use of the lancet, in his third volume, by some fatality passes over, *in the most profound silence*, the name and writings of Desportes; but in his fourth volume, when giving a kind of historical narrative of the different West India writers on the subject of yellow fever, takes occasion to misrepresent the learned Frenchman."

In page 49, the writer asks the following question: "Was

not the scheme of blood-letting in the yellow fever, adopted by Dr. Rush in 1793, substantially from Desportes?"

To this question we beg leave to respond in the following words, hoping that the "Baltimore" editor will receive them as from a gentleman well qualified to settle the question:—

"Dr. Rush, in manfully and successfully labouring to stem the torrent of error and preposterous madness which had diffused themselves throughout, and woven the tissue of general practice; and calling the medical mind back to the almost antiquated system of depletion, so fortunately pursued by Sydenham, Cullen, Monro, Gregory, Botallus, *Pouppé Desportes*, and *has attached immortal honour* to himself, and using a gallicism, *deserved well of mankind. The doctor's exalted dignity elevated him above the mean wiles of plagiarism. He, with the candour proper to great minds,* FRANKLY ACKNOWLEDGES *his obligations* to preceding writers."—(*A Treatise on Yellow Fever.* By John B. Davidge, A.M. M.D. 1798. p. 49.)

After so full and fair an exoneration of Dr. Rush, from the charge of plagiarism, and after such an acknowledgment of his manly *frankness*, *candour*, and *greatness of mind*, we deem it unnecessary to offer *our* feeble tribute of respectful admiration.

The fourth paper is written by Ezra Gillingham, M.D. a gentleman hitherto advantageously known to the profession by some practical essays in the Medical Recorder. His "Criticisms on the employment of mercury in fevers," are very judicious, and are written in a natural and unaffected manner, which the reader will feel the value of, after reading the compositions of the editor. We select the following passages for the gratification of our readers.

"The errors in the practice with mercury in bilious fevers, may be arranged under the following heads: First. It is given at every period of the disease. 'The general testimony of practitioners,' says Dr. Warren of Boston, 'who have been much in the use of this medicine, is in fa-

vour of its exhibition in all stages of febrile disease, even in the very commencement of the fever ;' and as if he wished that there should be no misunderstanding, he rather abruptly adds, '*or before it is formed.*' Second. It is employed in greatly excited states of the heart and arteries. Third. If there should be local disease accompanying the fever, it is given in all its stages and sometimes without regard to the propriety of previous evacuations. Fourth. It is administered in immoderate quantities. Fifth. It is used by many, in order that it may exert a specific stimulant power independent of its known properties. Sixth. It is employed to destroy feverous action by its own, or the mercurial action." 67.

" Practitioners who use mercury with freedom, commence with large doses of this medicine, and no evacuation is produced. This result is to be referred, in part, to the quality of the mineral, which seldom operates with facility in large quantities, and in part to the debility of the intestinal canal, being increased by the stimulus of the mercury. The dose is repeated again and again, and many hours pass before the object is accomplished, if it be at all effected. In some instances, that which probably might have been obtained with facility by some of the more simple yet more active evacuants, cannot be at all produced, because the stomach and bowels are rendered insusceptible of their power. In the mean time the disease is rapidly progressing, and our power over it is proportionally diminishing, for that which is to be done for the relief of this malady, must in general be done during its earliest period.

" Here, then, is a decided testimony against the custom of prescribing, without paying regard to the condition of the system. This employment of mercury is evidently empirical.

" Even if we designed to use mercury with a view to its general influence, it would, in most instances, be better to empty the intestines previously. Its effects would always be more decided and less injurious. Its operation as a sti-

mulant could then seldom be so pernicious, as it is in the manner in which it is now used, nor would there be so much likelihood of its increasing congestion on the viscera." 68.

"I believe that it will accord with the observation of most of those who have adopted both measures, that the use of the pulv. jalapæ comp. or of some of the salts combined with a small portion of tart. antim. will accomplish the object of subduing the force of the heart in fever, much more effectually than any of the mercurial preparations." 69.

"I have often been convinced that physicians make supposed discoveries of hepatic disease when the liver is entirely free from any other disorder, than what every organ must more or less suffer during a morbid condition of the general system. A physician will approach a patient and press upon the region of the liver with his hand, a thickness sometimes of several folds of clothing being interposed, and if there be any tenderness, it is very often considered sufficient evidence of hepatic inflammation. This tenderness may arise from a variety of sources. The muscles, the peritoneum, the bowels, the stomach, may all be extremely impatient of pressure when it is applied over the hepatic region, while there is no serious disease. Those who practise in bilious fever, often observe very great tenderness and some pain to affect the neighbourhood referred to, which will disappear entirely in a few hours. The skin is sometimes sore in fever throughout all its surface." 72.

"A dogma has long since been established, that, as it is commonly expressed, 'Herculean diseases require Herculean remedies.' This has led more to an extravagant use of mercury, than perhaps any thing which has ever been written. It seems to be in direct opposition to the elder maxim, contraria contrariis medentur, and is much less true. One may be at liberty to conclude that, at least in some instances, one Hercules is quite sufficient to demolish the system without the aid of the other." 80.

The fifth paper is headed, "Exchange of Function," which is thus *elegantly* introduced to the reader: "We have

read *somewhere*, in *some* book, or *fraction* of a book, that the uterus and mammæ often exchange function, that is, engage in alternateness of action." It is our intention to be somewhat particular on this paper, presently, and to bring forward "some things" which we have seen "somewhere," that must induce the editor of the "Baltimore" Journal to wish that *some* books, or "fractions of books," were swept from the face of the earth.

The next paper is a relation of the following interesting fact, by Dr. Shuman of Hagerstown, Maryland.

"A negro child, 14 or 15 months old, in the neighbourhood of Hagerstown, whilst sitting playing on a bed filled with *cut straw*, was seized, without any apparent cause, with a violent fit of coughing; indeed so severe was it, as to induce its mother, who was present, and who immediately took it up, to suppose that it was 'entirely gone,' as she expressed it. This strangling, however, soon passed off, and nothing remained but a slight occasional cough during the three or four following days, when the cough became increased, the breathing obstructed, the child screaming, as from violent pain, whenever it was moved; fever, and in short, all the symptoms of pneumonia, presented themselves. These were relieved by venesection, blisters to the thorax, and a strict observance of the antiphlogistic regimen. The child now appeared as well as usual, except for an occasional cough, and no more attention was paid to it for seven or eight weeks, when the mother observed a swelling on the side, situated about three inches from the *spine*, and over the *sixth* and *seventh ribs;* in a few days a fluctuation of pus was perceived in the tumor, and an opening into it was made with a lancet, when, together with a large quantity of pus, part of a *head* of *rye*, about two inches in length, was discharged." 92.

The seventh paper is "A memoir on fractures of the Thigh," by the editor, consisting of a transcript of Bell's criticisms on Fracture Machinery, with the writer's observations on Dorsey's Elements of Surgery. In this paper

the writer is very unmercifully severe on the living and the dead; and it is from this memoir we extract the motto prefixed to this review, which we hope shortly to apply to the learned editor with considerable success. It is his main business to show that all the machines hitherto devised, are totally inadequate to effect "permanent extension," and that they are all extremely similar to each other. Lastly, that he has devised a method of tying a sheet to a bedpost, which performs all that can be done by machinery. He does not think it of consequence to mention that he has applied Hartshorne's foot-screw to his apparatus, as this will strike every observer at first glance. To judge by the description and appearance of this method, we must form the conclusion, that all efforts to benefit a fractured limb are ridiculous, if they can do nothing more than this mode is capable of effecting.

This paper is followed by "Cross's Sketches of Medical Schools in Paris," and is already well known to our readers.

The next paper is a memoir on "Small-pox," in which the writer examines at length the question, "Is the human constitution susceptible of the action of the small-pox a second time?" This is one of the most rational of the papers by the editor, and he has proved, to his own satisfaction, by ratiocination alone, that this question should be answered in the negative. He inclines to doubt the cases reported, as being ill defined, and incorrectly described; as coming from persons of doubtful capacity for observation, or that other diseases have been mistaken for small-pox. We think his opinions on this point generally correct, and we should certainly be on our guard against too easy an admission of reports from incompetent persons. Nevertheless many persons well acquainted with the appearance of true small-pox, continue to believe that the disease has occurred more than once in the same individual. In the course of this essay on small-pox, he turns aside "more solito," and for the fortieth time perhaps, on the same subject, indulges himself in sneering at Rush and Dewees on the spleen, and on parturition.

In this paper however we find cause enough to regret that the editor of the " Baltimore" Journal is not more correct in his expressions, or more fair in his inferences. The reader can derive from the following paragraph, none but the most contemptuous notions of the French authorities, and might suppose them not only destitute of honesty, but of common sense.

" Were we to give, in detail, a catalogue of the wondrous and extraordinary things real, and mockeries unreal, of which we have heard and read, the patience of the reader would fail, and his understanding be overwhelmed. We have read of a child found in the abdomen of a boy, in France. It is true the wonderful history was not accompanied by any description of testes and ovaria, found in the belly of this boy, nor any probable conjecture, as to what other organs might have performed the acts of procreation, or whether this child was put into the belly of the boy without an act of procreation." 160.

We now request the reader to examine the report of the case in the words of M. Dupuytren, one of the most distinguished surgeons of the age, which he will find in page 563, last edition, of Richerand's Physiology. By this he will find that this was a case of *monstrosity*, related as such, and by no means unprecedented either in the human subject, or in the inferior animals, as any one may see, if he will refer to the various works on this subject. Nor is the case by any means as wonderful as that of the Chinese monster, described by Dr. Mitchell, the model of which is in the Philadelphia museum, where the body of a boy is growing from the breast of another, as if depending by his head from within the chest of his supporter. Another fact is also established by comparing the case with the editor's sneering ; that he has *never* read, or totally misunderstood Dupuytren's account of the dissection, as published in the Transactions of the French Academy, and as repeated in Richerand, neither has he seen the similar case recorded in the first volume of

the Medico-Chirurgical Transactions by Mr. YOUNG, whose "authority" the editor might be more willing to recieve, as he appears to be so fond of every thing "British."

To this memoir, succeeds another on "Extirpation of the Parotid Gland." In this, Bell, Burns, and others who speak on this subject, are criticized, and we are at length brought to this conclusion, that the author has *once* extirpated the parotid gland, and that his friend "laid the ligatures in his usual steady and collected manner!!" This last circumstance is really worthy of commemoration, and our notions of "Baltimore" surgery wonderfully elevated by hearing a gentleman lauded for such surprizing feats!

The last paper by the editor, is called "Professional usage justified by Etymology," in which the "learned" writer tells us, what has been known since the first printing of latin dictionaries; that "inficere" and "contingere," mean the same thing!

Were we not hastening to the consideration of more important matters, we should delay to express our opinions as to the literary merits and style of the "Baltimore" Journal. As it is, however, we deem it sufficient to remark, that we have seldom read any work written with so much turgidity of manner, or with expressions of such inflated verbosity. There is every where displayed the "*sesquipedality*" of Johnson, without his force or fire; the body, without the soul of eloquence—the keenness and bitterness of professional jealousy, without the magnanimity and equability of true philosophy.

In one particular, we heartily agree with the learned editor, and this is in his abhorrence of "literary piracy." We are very happy that he has expressed himself so strongly in favour of plainness of speech, when "the *stern rules* of philosophy, and the *sacred obligations* of science" are concerned. There is no circumstance more jarring and distasteful to a man who has spent himself in perfecting a peculiar system, or who has discovered some excellent truth, than to find himself wronged by another, of his merited reward.

through a cunning and dishonest appropriation of his labours. Hence all men have felt scorn and contempt for such baseness, and "literary pirates" have been ranked with those who are at once a pest and disgrace to society. To judge from the eagerness with which he aims at the discovery of such fraud, and the severity of the blows he inflicts on such offenders, he will doubtless be happy to learn that another instance has been brought to light, in which one who has long arrogated an honour, is stripped of his borrowed trappings, and the scientific world left to discover by what "unaccountable fatality" this was not long since performed.

"When we refer to authority, (says the Baltimore Philosophical Journal and Review, page 87,) it is to be distinctly understood, that we do not allude to the inaugural thesis of Dr. *Craven*, who the world is informed by the expositor of Burns' Midwifery, was graduated on this subject in 1778. We can assure you and also the reader, that no such person was graduated in that year or any other year from 1759 to 1785, nor any other writer whose work has come into our hands on that subject. On this point the Thesaurus Medicus Novus may be consulted. It contains the names of all the graduates from 1755 to 1785, and also the themes on which they were graduated. We are *thoroughly satisfied* that NO SOURCE *was open* and *accessible* to the editor of Burns' Midwifery UNTIL THE YEAR 1798, the period at which the thesis to be found in the physical sketches, was presented to Dr. Rush."

How wonderful it is, that the writer should not think it worth while to extend his researches beyond the year 1785; certainly several years intervened from that time to "the period" 1798. If he had looked further he would have found that the date of Dr. *Craven's* thesis is merely transposed, and instead of 1778, it should have been 1787, exactly ELEVEN YEARS *before* "the period, at which the thesis to be found in the physical sketches, was presented to Dr. Rush." If any one will examine a book entitled "Ca-

talogus librorum ad rem medicam spectantium in bibliotheca academiæ Edinburgensis, secundum auctorum nomina dispositus; anno MDCCXCVIII," he may read the following words, page ninety-six; "Craven Joannes Tentamen physiologico-medicum Inaugurale, De SECRETIONE UTERINA vel fluxu qui vulgo menstruus dicitur. Exst. in vol. 68 et. 69 Thes. 8 vo. Edinb. 1787." In the 24th page of a list of graduates appended to the abovementioned catalogue we read "JOANNES CRAVEN, Hibernus de *secretione Uteri.*" What is still more to the purpose Dr. Craven received his degree at the same commencement with Professor AUGUSTINE SMITH of Virginia, with Professor HAMERSLY of New-York, with Dr. JOHN SMITH of Georgia and Dr. R. S. KISSAM of New-York, most of whom are *now living*, and each of them most probably, have a copy of Dr. Craven's Thesis, as it is customary for the graduates mutually to present their classmates with a copy of their Inaugural Dissertation.

But this is not all; the doctrine of uterine *secretion*, was *common and public property*, at Edinburgh, in the year 1788, TEN YEARS before "the period, at which the thesis, to be found in the physical sketches, was presented to Dr. Rush." We say this because theses published at Edinburgh, after the period of Craven's graduation, reiterate the doctrine, without reference to the first propounder of this opinion. In the thesis of DR. JAMES CHICHESTER MACLAURIN, sustain- in 1788 we find the doctrine set forth at large and in plain terms. For the satisfaction of those who are curious on the subject we subjoin Maclaurin's words; this writer might also be accused of plagiarism, had he offered himself as the originator of the doctrine, but he uses it as a theme which has become to generally known to require any particular acknowledgment, and lays no claim to the honours of discovery.

"His igitur præpositis, *Secretione Vera*, aliis in corpore glandularibus undique simile peractis, menstrua elaborata esse asserere stat sententia, his præcipue adductus, nuper

dicta scatentia Uteri ipsius intrantia cavum, ibique terminantia foraminula, ostia revera ductuum huic inservientium Secretioni ducens.

"1mo. Vasa quæ uterum adeunt sanguifera, et mole insignia majore et numero plus depositare sanguinis constat quam ad solum visceris nutrimen necessarium: additque vires, solito convolutiora, majus tortuosa atque sinuosa, Glandularum adinstar aliorum vasorum, esse.

"2do. Omnia corporis fluida hanc confirmant convenientiam, propriis, quo propriis fungantur officiis, secreta glandulis: Bilem referam, aut salivam semenve? Glandulæ enim in utero sitæ parvæ atque frequentes, muci tantum, Humorisve blandi copiam affatim subministrant, in omni sicut membranacea intus inducta tunica cavitate fit, Tracheæ puta aut Œsophagi cavum.

"3tio. Fluxus ipse menstrualis lymphæ et anteceditur missione plerumque, cessansque eadem excipitur.

"4to. Illustris potissimum Hunteri pericula quæ humorem menstruum a sanguinis veri abhorrentem dotibus, coagulam pertinaciter renuere arguunt, et hanc quamplurimum adjuvant sententiam, stabiliuntque; neque enim quavis remora subsistens mechanica, aut objice, unquam rite coagulatus exire dignatur, ad enim summum grumosum sese obfert, sanguinis idcirco, propria, qualitatesque respuens solitas: qui enim cruor in ullum effusus cavum detentusque nisi concretus detegitur."—*Vide p.* 88. 89. 90.

The thesis of Maclaurin is concluded by the *same lines* from Virgil, with which Dr. Davidge's dissertation ends. Although this may have been accidental, the *coincidence* seems remarkable when we recollect the *coincidence* in the doctrine offered by the latter, after a lapse of *ten years*, from the date of Maclaurin's and *eleven* from that of Craven's thesis.*

We now leave this subject before the members of the profession, that they may make their own inferences, and draw their own conclusions. We have no disposition to

* Vide, "Dissertatio Physiologica, de Causis Catameniorum, Auctore Joanne Beale Davidge, M.A. M.D. *Birminghamiæ*, 1794."

wound any man's feelings, and therefore abstain from further observation on "the thesis" for which the "Baltimore Journal" claims the honours of discovery. We should be glad, indeed, that there was a possibility for the writer of that "thesis" to offer any thing relative to the "unaccountable fatality" that produced the dilemma in which he is placed. For ourselves, conscious of being impelled by no other motives than a love for truth and right, we shall conclude in the words of that excellent precept,

"Fiat Justitia; Ruat Cœlum."

R. L. S.

ART. XVI. *The Philadelphia Journal of the Medical and Physical Sciences, for Nov.* 1823.

Art. I. Ferguson on Marsh Poison. This author believes that animal or vegetable putrefaction is not essential to the production of pestiferous miasmata; that marshes when in a perfect state of vegetable growth and decay are least unhealthy; but that the previous existence of the marsh is absolutely necessary to produce miasmata, and the diseases which result from them. To support these positions he adduces a great variety of facts. He saw in Holland intermittent and remittent fevers prevail upon a plain of sand, perfectly level and dry on the surface, without vegetation, but filled with pure and potable water a few inches below; neither on the surface nor below it, did putrefaction or the materials which favour it, exist. In the same situation a wet and cold summer in 1799, produced no remittent fevers; but in 1810 when the summer was hot and dry, on a similar soil, the army was extensively affected with fever. Vegetable putrefaction was wholly absent. The dry ravines made by the mountain streams, produced fevers in the men who slept in them, though there was no vegetation, nor soil which could afford miasmata. The Guadiana and its tributary streams reduced to detached pools of water produced dis-

eases of the most destructive malignity, during a hot and dry summer. The Alentejo land on the Tagus, though perfectly flat and sandy, is sickly in the autumn, in proportion to the drought of the preceding summer. A bare open hollow country resembling the dried bed of a lake, though dry as a brick, with the vegetation entirely burned up, also produced malignant fevers; a dry, bare and clean savannah, situated at the town of Corea, in Spanish Estremadura near the river Alagon, whose banks were perfectly dry, without an aquatic weed, a speck or line of marsh, produced disease extensively, so that the monks removed from it five months in the year. He adds that lakes, marshes, ditches pools or vegetation in the most unhealthy parts of Spain, had no agency in producing disease. On the contrary, he found that the country was only particularly salubrious, when, by the periodical rains, the vegetation and aquatic weeds had been restored. The overflowing of marshes rendered the air perfectly harmless; in the island of St. Lucia, whilst the top and shoulders of the hills which were covered by a thick stratum of soil, became entirely unhealthy, when exposed to the drying influence of a vertical sun. The same positions were illustrated in Barbadoes, Trinidad and other parts of the West Indies: The author then details some curious particulars on the subject of miasmata; the town of Point au Pitre, Guadaloupe, though situated amidst the most putrid marshes, the stench of which was never absent from the streets, was by no means unhealthy; in other places he made the same observations.

But at the Fort of Fleur d'Epee, at the extremity of the marshes, where they approach to the state of terrafirma, and where there is little or no water to be seen on the surface, and no putrefactive smell perceptible, every one died. After noticing some other facts of the same kind, he concludes with the remark, that putrefaction and the matter of disease, are altogether distinct and independent elements, without any necessary connexion; a fact which is abundantly

supported by the observation of the medical men of Philadelphia, during the prevalence of the yellow fever.

He observes further, that the borders and even the centres of marshes, proved less dangerous than the neighbouring heights of the purest soil, and healthiest temperature. He supports this position by many interesting facts, observed in the islands of Trinidad, Antigua, and Dominica.

Another property of the marsh poison, is its adherence to lofty and umbrageous trees ; the inhabitants of the territory of Guiana, where lofty trees abound, place their habitations, with the most perfect impunity, near to these marshes, when thus protected by their proximity. After adducing other facts, he concludes, from what he has observed, that it is upon the driest surfaces, and not where putrefaction exists, that fevers are produced : positions which we think he cannot support. One condition only seems indispensable to the production of the marsh poison, that is scarcity of water where it has previously and recently abounded.

Other qualities of the marsh poison are then enumerated ; though no experiments have hitherto determined whether the marsh poison is specifically lighter or heavier than the air ; yet it is a remarkable fact, that in all malarious countries, the inhabitants of ground floors are particularly affected, more than those of the upper stories. Facts are then adduced from the state of disease in the barracks in various islands of the West Indies ; he adds, as a proof that it passes near the surface, it is certainly lost and absorbed by passing over a small surface of water, which could scarcely happen, unless it came into contact with the absorbing fluid : the rarefying heat of the sun, the steady currents of the trade-wind also dissipate it ; cultivation has the same effect, by permitting the escape of pestilential gases, and exhausting the strength of the morbific principle. The uncultivated Savannah, in the West Indies, as well as the neglected fields about the city of Rome, according to the best observers, are equally productive of that

dreadful poison, by which so many lives are annually sacrificed.

The paper is concluded by the observation, that the various types of fever appear in the West Indies, according to the temperature, so that the thermometer is an accurate means of ascertaining the locality of the different grades of fever, whether of ague, mild remittent, remittent bilious, or yellow fever; a position, which we must confess our author has given no facts or observations to substantiate, and which would refer the origin of disease entirely to caloric, without the interference of secondary causes. He next makes some conjectural remarks on the fact, that the negro is not susceptible of the influence of the marsh fever, and concludes, by observing, that in the West Indies, the most aggravated forms of this disease, resemble in their character, the effects of the bite of poisonous serpents, an observation made by Dr. Rush. It is probable that the effects of those venomous reptiles on the human system are equally various as the types of fever: the bite of the rattlesnake in this country, produces a disease resembling typhus, and to be cured only by the same stimulating means.

Art. II. Dr. Chapman on Animal Heat.—This paper contains a well digested view of the facts and experiments, which have been performed on this interesting subject, as well as the doctrines which have arisen out of them. The author commences with the position that respiration is a vital and not a chemical process; that its energy keeps pace with the power of the system, and that whatever cause debilitates either through the corporeal or mental faculties, the vigor of the whole also debilitates the function of respiration: this function is then considered as the source of animal temperature. Dr. Crawford's opinion, which attributes the evolution of this quality to the different capacities of venous and arterial blood, is discussed and dismissed as insufficient to explain the phenomena, because the capacities of the two kinds of blood are found not to differ; next, because the temperature of the animal is derived from various sources,

as from the skin, a subject on which opinion is not yet sufficiently certain.

After mentioning several other insufficient sources, the conversion of caloric from a latent to a sensible state in the chemical operations of the system, is examined as the last and most probable of the chemical sources of animal temperature; they are all rejected, from the fact, that the heat of the animal, notwithstanding the continual evaporation from the surface, the diversified temperature of the air, and of the bodies among which it may be placed, continues always the same; circumstances which could not have taken place, if the phenomenon was merely the result of the chemical operation of inanimate matter; it must therefore depend upon something superadded, which the author believes to be the principle of life? He then shows the immense generation of heat by the human system, its power of bearing up against temperatures exceedingly elevated, as of 260° or 300° of Fahrenheit, without the slightest possible injury, proving that the system is a complicated union of powers by which this result is produced, wholly independent of the ordinary laws of inanimate matter. These same remarks apply to all the various forms of living beings; for though the lower orders of animals are not capable of supporting greatly increased temperatures, yet they resist the action of cold, and live in an extremely depressed surrounding medium.

He then proceeds to examine the other means which the chemical physiologists have assigned to keep in a state of depression the heat of the animal; the diminished consumption of oxygen in high temperatures, which it is alleged is a chemical result, necessarily following from the increased heat of the surrounding medium, thus enabling the system to support the temperature in which it is placed by the evolution of a diminished quantity from the rarefaction of the air. The facts that respiration and circulation, as in the instances stated by Hunter, may be nearly suspended, and yet the temperature be still preserved, and in some instances increased, as in asphyxia, apoplexy, obliteration of

the trunk of the arteries as in popliteal aneurism, are then stated as giving a death blow to the theory of the chemists. Indeed from the circumstances under which animal temperature is developed, being so various, and depending upon the integrity of all the structures which enter into any part of the body, we have no hesitation in agreeing with the doctrine advanced by the author. The nerves and the blood-vessels, must be both in perfect function, otherwise the temperature declines. It has been proved by the observations of Earle, that in palsy the part affected has neither the power of preserving its temperature when exposed to low, nor of resisting the influence of high degrees of heat. When the blood-vessels are small and contracted in their course through a limb, the same result takes place. The author concludes, by stating that he considers the production of heat, to be the result of some secret power possessed by the animal, peculiar to vitality, which, like the other functions of this subtile quality, has the same laws. He further remarks, that the lately presented theory, which makes it a secretion, as also that which attributes it to the liberation of the caloric which enters the circulation with the chyle, in the various processes of secretion, nutrition, exhalation, thus becoming sensible, and constituting animal temperature, are both surrounded by difficulties which render them a subject still uncertain and doubtful.

Art. III. Henderson's Reports on Diseases.—In bad cases of external scrophula, the first disease noticed by this writer, the saturated solution of lime in muriatic acid succeeded best; a seton cured the disease when it occurred in cephalæa scrophulosa, in a woman who had lost one eye from the disease. Flannel, protection of the feet from cold and moisture, with a plentiful nutritious diet, this author found most successful in the negroes of the south, among whom it most frequently appears. He reprobates the practice of healing fistula in ano, in scrophulous subjects, as consumption is generally the result; this remark has been made in other cases, where the fistula has no connexion with scrophula.

We think, however, that the expediency of thus healing fistula would be rendered by no means doubtful, if an issue was established in another part; and though Dr. Henderson quotes good authority for this connexion between fistula and consumption, independently of scrophula, yet we believe, that in many cases of fistula, the appearance of consumption may be traced to the fact, that in general, it has been customary to confine persons affected with this disease to bed, and by a protracted illness, they are thus debilitated, and consumption is the result. Cholera is referred by Dr. Henderson, generally to teething, and accordingly he recommends cutting the gums freely during that process. That teething is often united with green and frequent evacuations, is undoubted; but that it is not the most general cause, is certainly pretty well ascertained: Hot weather is a more probable source.

Pertussis.—Copious bleeding and blistering, when pneumonic inflammation supervened, he thinks was successful in two cases. He compliments Dr. Watt on his resolution in investigating the state of the lungs in his two children after their death, and the determination of the importance of venesection in pertussis. We believe that the disease generally terminates in inflammation of the lungs when it is fatal, and in that stage we doubt whether bleeding or any other remedy ever does much good, as the patients are generally too much exhausted by the disease to be relieved.

Dysentery.—In a case of chronic dysentery, accompanied with subsultus, Dr. Henderson succeeded with ten grains of carbonate of ammonia, and one grain of opium, given every three hours. In another, attended with a desire to go to stool immediately after taking food, he succeeded with the Dover's powder and farinaceous diet; all other remedies had failed.

Bilious Remitting Fever he treats in the ordinary mode, only that he seldom finds bleeding necessary. Mercury succeeded best in typhus, particularly in the last stages. Salivation was not advisable only in the slightest possible

degree. When the fever took on the dysenteric state, purging and Dover's powder succeeded best; and the most useful diet, was equal parts of coffee and well boiled milk. On *Tetanus* he advances nothing new. Some cases of spontaneous evolution of the fœtus are next stated, where the arm and shoulder presented, and in which the efforts of nature turned the child; the lower extremities, and in one case the head presented, and was delivered as in common labour. These cases are interesting, as they show that amputation of the arm, as has been advised, is not at all necessary.

Cynanche Tonsillaris Biliosa.—This disease is merely ordinary bilious fever, with a determination of a gangrenous character to the tonsils;—there was nothing peculiar in the treatment.

Curved Spine.—This case terminated in death, in a few days after setons had been applied to relieve it. The symptoms were fever, and convulsions, which were attributed by our author to fifteen drops of laudanum, taken a short time before. It is probable they were produced by inflammation of the brain and spinal marrow, the result of the disease in the back.

A case of Spina Bifida, in a young woman aged 18 years. The tumor was congenital, of the size of a pullet's egg at birth, now three or four inches across; attended with pain in the head and back, and followed by epileptic convulsions. It was left to nature.

Bilious Fever.—Here there was nothing peculiar. It was treated with the most decided good effects by a gentle mercurial salivation.

Art. IV. Coates *on Comparative Phrenology.* This article, though extremely creditable to Dr. Coates, is not sufficiently practical for the objects of this Journal.

Art. V. Case of Rupture of the Axillary Artery, in a successful attempt to reduce an old luxation at the shoulder joint. By Professor Gibson, of the university of Pennsylvania.

This luxation had continued for more than two months

previous to any attempt to reduce it. Bleeding was practised to debilitate the patient, but not to fainting, which is to be regretted, as there can be no doubt that at the moment of syncope, comparatively little force would be necessary: the ordinary means were used; the head of the bone slipped into the cavity, after considerable difficulty, but it would not continue there, after the operation was finished; a swelling was perceived about the deltoid and pectoral muscles, which at first was attributed to inflammation; in a short time, however, the death of the patient convinced the medical attendants of their error.

The following appearances, on dissection, shewed the nature of the accident. The axillary artery had been united to the capsule of the joint, where it surrounded the neck of the bone; accordingly, in the attempts to remove the bone from the socket which it it had formed in the subscapulary muscle, it was necessarily stretched and ruptured, and the death of the patient was the result.

This case is highly reputable to the candour of Dr. Gibson. The reduction of luxations of the humerus has been effected after a displacement of six months; of course he is exonerated from censure for want of success.

Art. VI. Case of Imperforate Anus. By J. T. Sharpless, M.D. Philadelphia. In this patient, the anus was closed by a dense membrane, and the fæces found their way into the vagina through an opening of the size of a goose-quill. A small opening was made into the membrane closing the natural opening, with the view of enlarging it by tents; they were unsuccessful, and it was opened by a bistoury; a tube covered with bougie plaster, so as to prevent the fæces passing through the opening into the vagina, was introduced; the power of the sphincter was gradually restored, the opening into the vagina closed, and the patient perfectly recovered.

Art. VII. Dr. Daniell, of Savannah, on the use of Charcoal in Constipation of the Bowels.—Dr. Daniell considers the charcoal to operate by uniting with the mucus of the intestines, which, from its increased quantity, produces the dis-

ease. It forms balls, varying from the size of the largest hazlenut to that of an egg; after their formation, an active cathartic is given, and they are expelled. He then states a case in which it was used, but from the variety of other medicines taken, particularly calomel, which affected the mouth, of itself a powerful remedy in constipation, we think the charcoal rather intitled to be considered as a cause of this affection, than the contrary.

When Dr. Daniell attempts to illustrate the use of a remedy, he should recollect to obtain a clear result, that it is necessary to exhibit it alone; the medical world will be slow to believe that charcoal, which produces concretions in the bowels of the size of an egg, is a specific in constipation.

Art. VIII. Case of Pulmonary Disease, attended with some anomalous symptoms. By S. Jackson, M. D.

This case consisted of an inflammation of the superior lobe of one of the lungs, which terminated in a vomica, "which instead of escaping by the bronchiæ, found its way under the clavicle into the cellular membrane, giving rise to an emphysematous condition of the neck, face and trunk," which, in the latter stages of the disease, existed to a considerable extent. It commenced with symptoms like croup, and was treated accordingly.

The contents of the remainder of the volume consist of reviews; the first is historical and retrospective, on the works of Hippocrates; as there is nothing practical to be elicited from this review, we pass it over. The second discusses the merits of an Italian work, Gianini on fevers. The first part of the review confirms a practical maxim long since known, which is, that "cold water" (by immersion) "is the remedy for the paroxysm," (applied in the hot stage) "and bark for the intermission. The former cuts short the fever; the latter prevents its return." The reasoning on the modus operandi of this remedy is then given, which terminates in this conclusion, that its action is debilitating. The discussion on this subject is principally sustained between Brown and our au-

thor; which occupies the greater part of this review. The cold bath is recommended in the commencement of the sweating stage, and has been used by the author with decided benefit.

Art. XI. Gives an account of the Tranactions of the Medical Society of Copenhagen.

Of these, little more than a catalogue is given. Art. XIII. of the vol. contains an account of a syphiloid disease, prevalent in the country, called "Marsk," at Bordesholm in Holsatia, and in Finland. The disease resembles the gibbens, and is cured by mercury, as the lues venerea; from some remarks made by the reviewer, we should be disposed to believe, that any irregularity or difference in the symptoms of this disease and the ordinary lues, arose from scrophula or scurvy: particularly as he states, that it appeared principally among the poor.

Art. XII. Is a review of Dr. Horner's Practical Anatomy. The discovery, by the author, of a muscle, which rising on the os unguis runs along the lachrymal ducts, and is inserted near the punctum lachrymale, is noticed; and the work, in other respects, praised.

Art. XIII. Contains a Biography of Dr. Rush, whose merits are too deeply engraven on the hearts of our countrymen, not to be recollected with regret for their loss, by every admirer of genius and virtue.

An obituary notice of Dr. Lawrence, concludes the number. He was a man of real merit. He lived beloved for his many virtues, respected for his talents, and he died regretted by all who knew him.

ART. XVII. *New-York Medical and Physical Journal.* Vol. II. No. III.

Art. I.—An Examination of the Question, Whether the climate of the valley of the Mississippi, under similar parallels of latitude, is warmer than that of the Atlantic Coast? By Lewis C. Beck, M.D. of Albany, New-York.

The temperature of the valley of the Mississippi, has generally been considered higher than that of the corresponding Atlantic coast; this opinion was adopted from the supposed conclusive arguments advanced by Mr. Jefferson and Mr. Volney. Dr. Beck has, in his paper, adduced many facts to combat the above opinion; and he has displayed, with much ingenuity, and patient research, facts which tend in a great measure, if not to disprove, at least to excite inquiry into a subject which must be admitted as doubtful. Dr. B. concludes, that there is little or no difference in the mean temperature of the two sections of country, and founds his opinion upon the fact, that the plants of each are found or may be made to flourish, in either; and that accurate thermometrical observations, made at several places in the valley and on the coast, prove that there is no material difference. It is to be regretted, that no mention is made of the state of the atmosphere or of the rivers; as it is obvious that the weight and moisture of the air, the variations of the winds, and quantity of water over the face of the two countries, must have considerable bearing upon the question; moreover, the rapid improvements daily occurring in the western country, may alter its mean temperature from year to year.

Art. II.—Observations on Dysentery, delivered at Utica, New-York, as a discourse, before the Medical Society of the county of Oneida, at the anniversary meeting, in July 1823. By Dr. Alexander Coventry, President of said Society.

We are informed by the author, that he selected dysentery for the subject of his discourse, "from a conviction

that the information to be obtained from systematic writers concerning it, is very defective." We, who have, unfortunately, too often to encounter this formidable malady, were overjoyed at the prospect of improvement, promised us at the very beginning of this paper; but our disappointment was as great, upon a patient perusal, as we discovered no new ideas or method of treatment, suggested by the author, that we were not perfectly familiar with. It affords us some pleasure to state, that the discourse is well written, and contains much sound practical matter; but we cannot subscribe to the opinion that diarrhœa is the best prophylactic against dysentery. Our author considers that remittent and intermittent fevers, and dysentery, all depend upon the same cause. There is no doubt but that such is the fact in this country; but experience also proves that the latter disease is also occasioned by irregularities of the air, both as to moisture and temperature, superadded to the general cause of the former. Dr. C. disapproves of the theories of fever and dysentery heretofore proposed to the medical world, and submits his own to its consideration. He imagines that the putrefactive effluvia produce atony in the cuticular nerves, which, by sympathy, affect the chylopoietic viscera in the same way; hence, congestion of the portal system arises, which, in its turn, occasions an interruption in the peristaltic motion of the bowels, spasms, gripings, defective bilious secretion, &c.

Ipecacuanha, rhubarb, and opium are condemned, though we think unjustly; we have derived much advantage from ipecacuanha, and the dover powder. Bleeding is also disapproved of, particularly for natives of this country. We regard bleeding as a most essential remedy in all cases of a hard and quick pulse, accompanied by severe pains and tenderness of the abdomen; many lives are annually preserved by the lancet, and no danger can arise from it in the hands of the judicious. Mercury is also condemned by Dr. C., a matter of some astonishment to us, as we cannot conceive, how so old a practitioner should not have discovered the

absolute necessity of mercury, both as a cathartic, and a salivant in many cases of dysentery. We have attended many that yielded to no other mode of treatment, but the mercurial, which frequently arrests the disease, as if by charm, as soon as the gums become tender. Neutral salts are highly extolled in this paper; we are advised to administer them throughout the whole disease, in such manner, as to maintain an abundant catharsis, till the dysenteric symptoms disappear entirely. Dr. C. relies chiefly upon neutral salts for the cure of dysentery, and indeed, his principal object in his discourse, appears to be their recommendation.

Art. III.—Account of the Introduction of the Yellow Fever into Pensacola and New Orleans, in the year 1822. By P. S. Townshend, M.D.

Dr. Townshend roundly states in this paper, the "only places in the United States, which suffered from yellow fever in 1822, were the seaports of New York, New Orleans and Pensacola." We doubt not but that he is sincere in the assertion, and shall content ourselves by merely stating that such was not the fact, as we know positively, the disease appeared sporadically in several other towns, and even in some of the upper counties of Virginia. It is true that the cases were not numerous, but sufficiently so, to prove to our minds, that the fever is a legitimate child of the south, and we believe of the north also; at least as high up as New-York. An old proverb says, that an indiscreet friend, is worse than an open enemy. It applies perfectly in the case of the author, for not content, by asserting that the yellow fever is an imported disease into New-York, he endeavours to prove the same with regard to Pensacola and New Orleans. We are irresistibly compelled to question the sincerity of the judgment of those, who take the lofty ground of proving that such a place and climate as that of New Orleans, is not capable of producing yellow fever, and we can place no reliance upon their arguments in favour of the health of their own city, when they have the hardihood

to use them indiscriminately for New-York, New Orleans and Pensacola. Dr. T. considers the importation of yellow fever, into Pensacola, and from thence to Orleans, as a matter of course, simply, because he has been enabled to discover, that a vessel arrived at the former place with yellow fever, and that another was known to arrive subsequently, at the latter place, in the same condition. The advocates of the contagiousness and constant importation of yellow fever, affect to consider their reasonings conclusive, when established upon the reports of certain boards of health, announcing that such and such vessels had been traced as the cause of the mischief, but we, who believe that it is generated in our country, as well as imported, and who are satisfied that it is not contagious, look upon such reasoning as extremely feeble, for between places of such extensive and daily intercourse as the Havanna and New Orleans, vessels must be daily arriving with cases of fever in both parts, contracted by causes co-existing to nearly the same degree in the two. If the physicians of Havanna were as great sticklers for the salubrity of their town, as Dr. T. and others, for that of New-York, New Orleans, &c. it would be no difficult task, for them to adopt their arguments, and triumphantly publish to the world, that yellow fever is not a disease of their city, but an imported one from New Orleans, or probably New-York.

It may be said that in 1822, the fever did not appear before the arrival of a vessel that brought it from Pensacola. We are not of that class of reasoners, who can only distinguish between causes and effects from their succession, but know that all things are not necessarily dependent upon each other because they happen at different periods of time; in a word, the fever may appear a little earlier in Havanna, than at New Orleans; a vessel may introduce the disease from the former into the latter place, but will not attack any but those who expose themselves to the effluvia arising from the foul parts of the vessel, and can in no way spread itself, unless the atmosphere of the city (New Orleans,) be

already in such a state as to favour its progression; and if that be the case, it will arise spontaneously, as every predisposing and exciting cause that exists in the Havanna, are known likewise in New Orleans, and not unfrequently in New-York. We have observed the disease on several occasions, brought into our town from the West Indies, without any person, whatever, suffering by it. Dr. T. thinks that because the fever did not appear as early in New Orleans in 1822 as usual, and because it is absent altogether some seasons, we ought to admit its importation into that city, as a matter beyond a doubt. By the same reasoning, pleurisies, catarrh, bilious fever, &c. are all imported, since we are but little afflicted by them some years in comparison with others. We are perfectly convinced that yellow fever may be imported; but we are equally so, that it is not contagious, hence we acknowledge the propriety of quarantine regulations to a certain extent, that is to the exclusion of foul vessels, but not of persons, although actually suffering under the effects of the fever. We could exclude from our ports for a certain time suspicious vessels, not that there is any danger of their spreading the disease through a city generally, but merely to preserve the lives of the labourers and others, whose duties might call them on board of such vessels, and thereby expose them to the effluvia emanating from their holds, &c.

Art. IV. Journal of Medical Cases, occurring in a voyage to the East Indies, in the year 1819, *on board of the Ship Neptune.* By James Eddy, M.D. of New-York.

This paper is not particularly remarkable, either for the novelty of the diseases, or their treatment.

Art. V. On the use of Mercury in Onychia Maligna. By John B. Beck, M.D.

By Onychia Maligna is meant an obstinate ulceration of the fingers or toes, around and under the nails, without much pain. Dr. B. has tried successfully the effects of mercury, which he was induced to do upon the recommendation of Mr. Wardrop of London. The practice appears to

be good, though we should not be disposed to adopt it until the usual methods had failed.

Art. VI. Case of Phlegmasia Dolens, alternating with Pneumonic Inflammation. By Abraham D. Wilson, M.D. of New-York.

The patient was a lad of a delicate and nervous temperament, about 17 years of age. Thirty-six hours after the attack of pneumonic inflammation, the calf of the right leg became enlarged, white and glossy, and extremely painful. The pulse was tense and hard. Bleeding and the antiphlogistic method was adopted as soon as the disease of the leg began; that of the chest ceased and returned on the fifth day, at which time the former had disappeared. Dr. Wilson found it necessary to continue his antiphlogistic remedies throughout the whole disorder.

Art. VII. A Methodical enumeration of the principal Parasitical Animals; read to the New-York Lyceum of Natural History, as the Zoological Lecture, on the 21st of April 1823. By Samuel L. Mitchill, M.D. President of the Society, Professor of Botany and Materia Medica, in the University of New-York, &c.

The learned Doctor has favoured us with a very accurate account of the numerous animals that infest the bodies of man and several other animals. His paper, though very interesting to the minute naturalist, can not afford much instruction or amusement to the readers of the Recorder, unless they be professed naturalists; those therefore we must refer to the *Journal.*

This number of the Journal contains too, many good reviews of the works of Dr. Miner and Dr. Tully on fevers, and the Flora of the northern and middle sections of the United States. The reviews speak favourably of both productions.

The medical and philosophical department, contains a letter from Dr. Mott to Dr. Beck, stating that he had effected a cure of traumatic tetanus, by means of the spirits of turpentine, administered a tea-spoonful every two hours

till twelve ounces were taken. Dr. Mott promises the details of the case for a future number, when we shall submit them to our readers.

ART. XVIII. *The New England Journal of Medicine and Surgery, for October* 1823.

THIS Journal commences with a sensible paper on the subject of the effect of the different textures in producing different diseases, and considers their modifications as the result of the affection of one or more of the textures which compose an organ. These views are exemplified by the diseases of the abdominal viscera; the peritoneum has its morbid changes, which run their course separately and independently of the other organs; it may be inflamed, or affected with dropsy; the lining or mucous coat of the intestines may be subject to hæmorrhage, inflammation or diarrhœa; the muscular coat to spasm, and these affections may exist in a combined or a separate state. These various textures are considered as dissimilar, exhibiting various phenomena and dissimilar changes. The serous membranes in the head, chest, and abdomen, are subject to dropsical effusions, and adhesive inflammation; the mucous membranes to suppuration, and to the effusion of blood or hæmorrhage, and the cellular membrane to the formation of abscesses. The functions of the various organs also influence the phenomena and progress of diseases affecting any particular texture; inflammation of the tunica arachnoidea, besides the ordinary symptoms of that affection, is attended with those of pressure on the brain and derangement of intellect. In inflammation of the peritoneum covering the stomach, indigestion and vomiting are produced.

In fine, the view taken by the author is, to show, that in studying pathology, our most certain mode of arriving at success, is to trace the original affection in its various stages of progress, maturity and decline; to ascertain the parts

which have been involved in the disease by proximity, and the extent of its prevalence, and then to trace what more distant parts or combination of parts have taken on the diseased action.

Cases in Morbid Anatomy, by John Gorham, M.D.—The first case is one of phthisis pulmonalis, attended with a tuberculated state of the larynx and pharynx. The peculiarity of this case was the absence of hectic fever, though the lungs were filled in the tubercles. His second case is that of a Mr. Mumler, who we are told was a member of the Boston military band, and whose duty it was to play on the horn. Aristotle has left a maxim which may be recollected with profit, by Dr. Gorham and some of our correspondents. 'That book is most perfect to which nothing can be added or nothing taken away.' This case is one of common pleurisy, with nothing peculiar in it. In the third, the stomach was contracted to the size of a crow quill, about its middle and upper extremity. The symptoms produced, were incessant vomiting, for several months previous to his death.

A case of syphilitic ulceration of the larynx is related by Walter Channing, M.D. Nothing remarkable attended the treatment.

Clinical remarks, by O. L. Peirson, M.D.—A wound of the dura mater, in a child aged four years, treated successfully by mild dressings, gentle purgatives, and low diet. Caustic was applied to the granulations which arose in the wound.

The second case is one of death from a blow on the head, with nothing peculiar.—The third case is a wound of the dura mater, in a boy aged ten years, by the same means as the first.—The fourth is one of recovery from fracture and depression of the skull. Nothing peculiar.

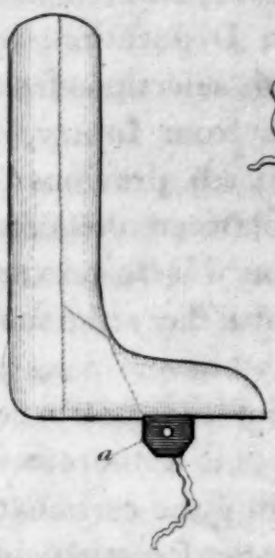
Dr. Webber relates a case of weakness of the knee-joint; George Russell, a case of hydrophobia, and Dr. Bigelow, a case of ruptured uterus. From these, no practical inference can be drawn, or new information gained. We are astonish-

ed at the barrenness of this journal. It consists of cases without novelty or interest. It concludes with the reviews of the following works: M. Wardel, on Schirrus of the Stomach, Dr. Bayley's Reports on Yellow Fever, Miner's and Tully's Essays on Fevers; A treatise on Dislocation, by Astley Cooper; a work of great merit, with selections from the foreign journals; a case of Sphacelus from Injury, in which amputation was successfully practised, previous to the formation of the line of separation between the dead and living parts, is quoted: the indication was to prevent the exhaustion of the system occasioned by delay: the man recovered.

Also, a case of laceration of the fibres of the gastrocnemius, cured without rest or confinement. Tic doloureux is reported to have been successfully treated by the carbonate of soda, in dram doses, twice a day, and by the Prussic acid, which latter is considered as a specific. The same disease is also stated to have been cured by Andrew Wilson, M.D. by large doses of purgative medicine. The indication was to remove morbid matters from the organs of digestion.

Fig. 1.

Fig. 2.



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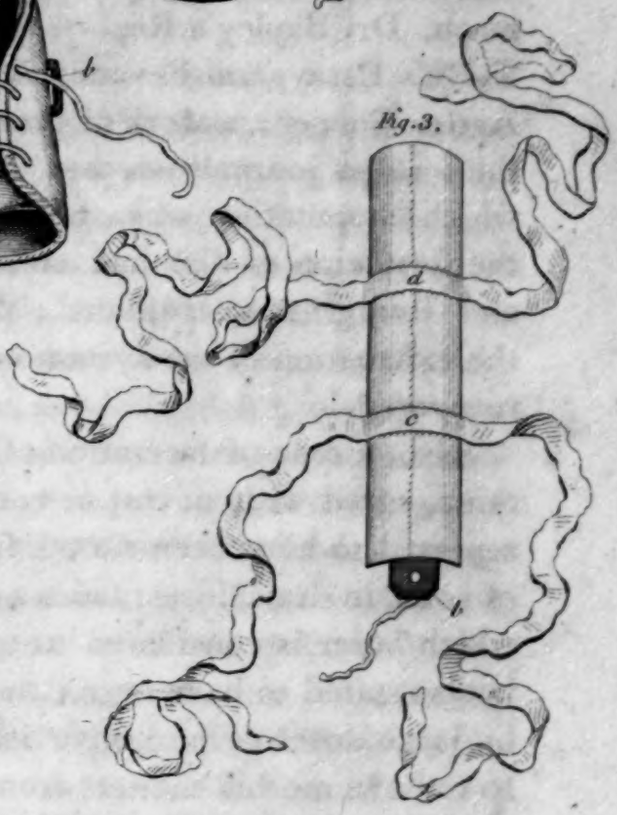
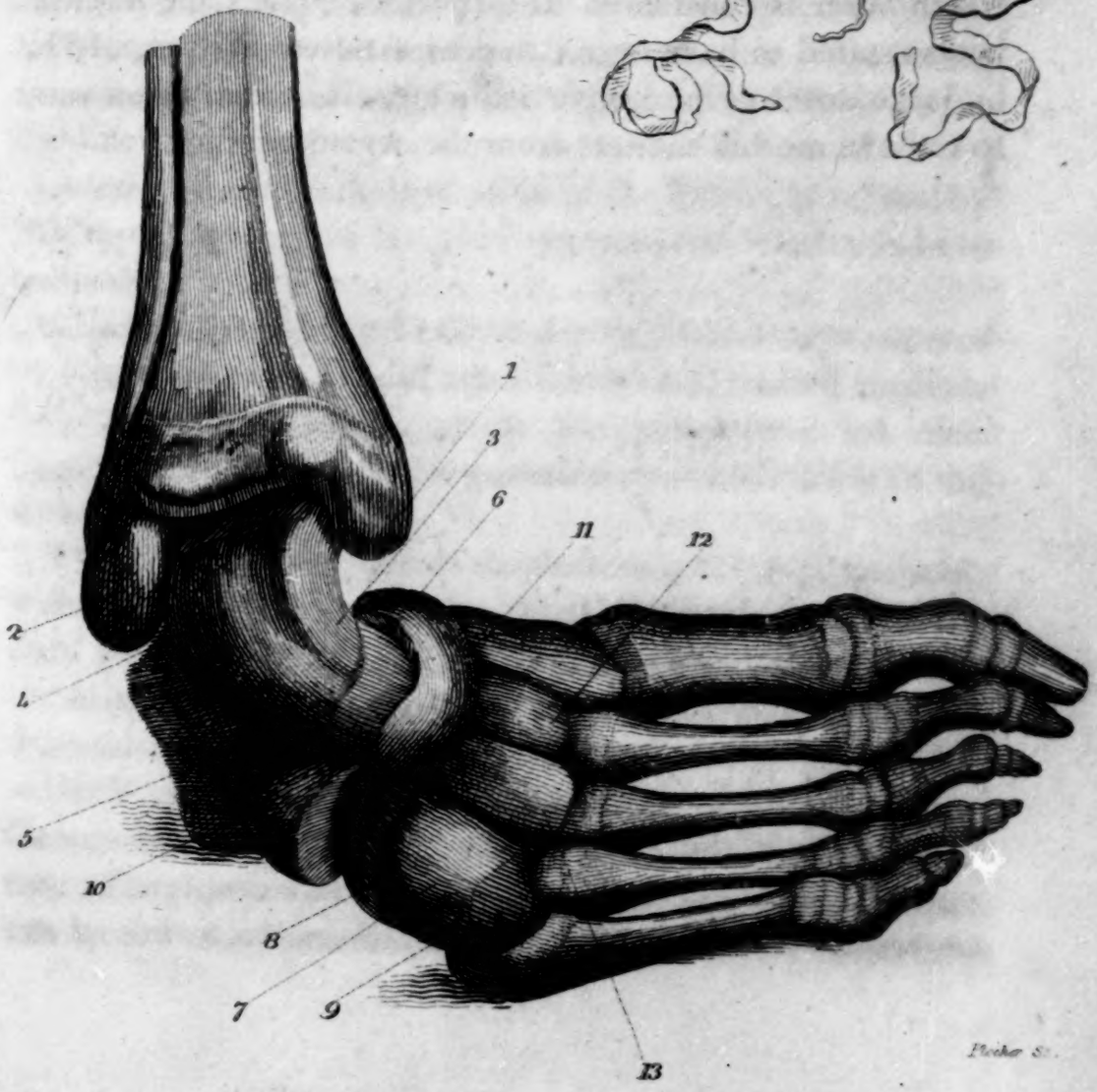




ANALECTA.

1. *An Engraving of a new Apparatus for the Prevention and cure of Pointed Toe.* Invented by Joseph Amesbury, Esq. Member of the Royal College of Surgeons in London, &c.

I do myself the pleasure to forward to you an engraving of an apparatus, which I have contrived for the prevention and cure of that deformity which is usually denominated *pointed toe.* In this deformity the foot is extended upon the leg, and becomes fixed in that position. It sometimes exists at birth, but generally arises from disease or accident. The action of the apparatus is to keep the foot flexed, or to bend it when extended.

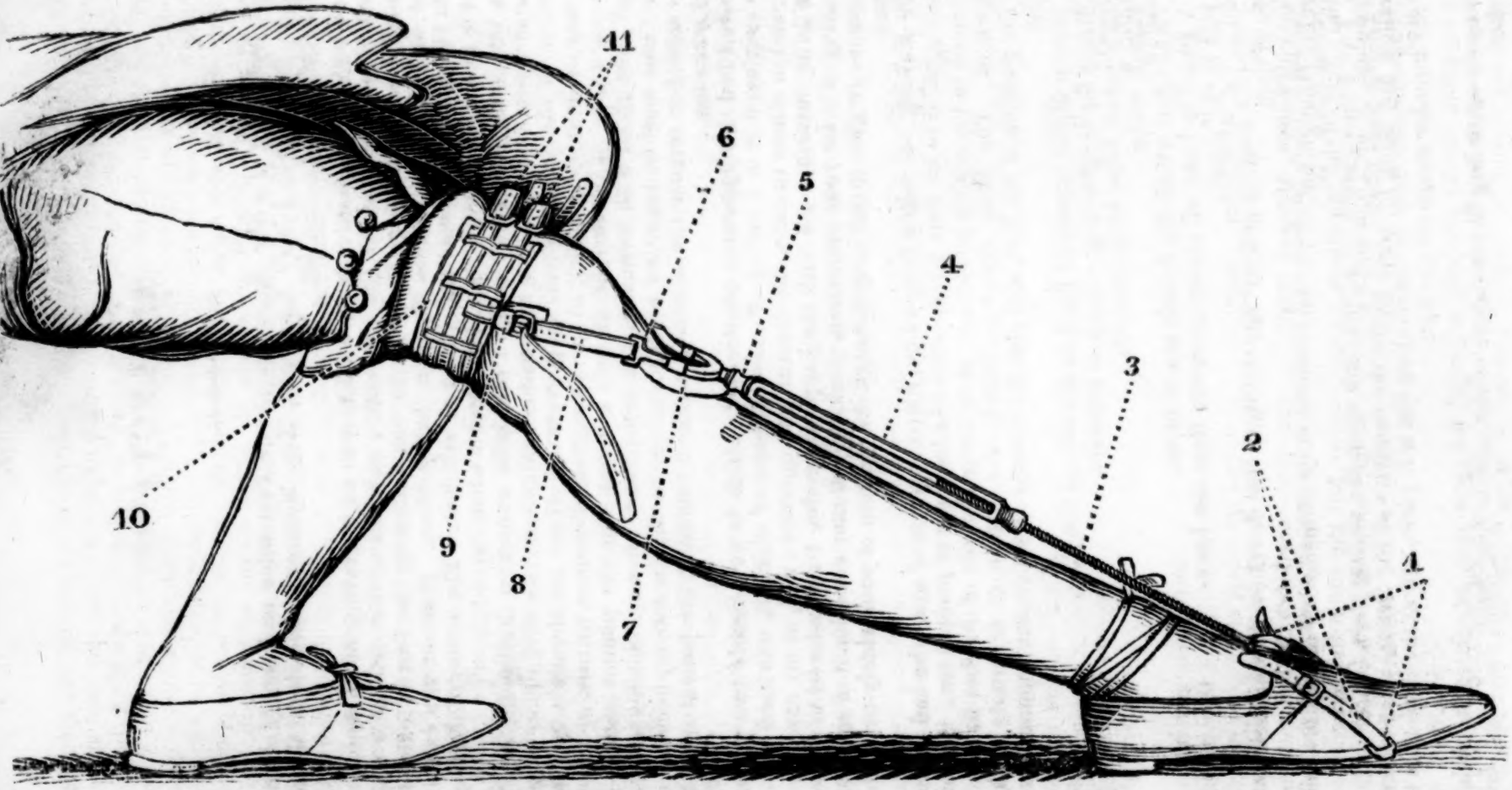
By the judicious management of this little apparatus during the cure of those diseases which produce a permanent extended state of the foot, the occurrence of the deformity may be prevented. If the toe already points, the foot may be bent upon the leg in the most gradual manner, by turning the female screws, 4. If the case be of such a nature that the patient may be allowed to be about with impunity, the apparatus in no way impedes progression. This must be regarded as an advantage in the treatment, because we are enabled to remove the affection without confining the patient from his usual avocation.

Since I had this apparatus constructed, which is now nearly two years, I have employed it in a variety of cases, in some of which it was used to prevent, and in others to cure, the deformity in question; and, as my experience of its utility furnishes me with the happiest results, I am induced to send an engraving of it for your inspection, thinking you may consider it of sufficient importance to give it publicity through the medium of your widely-circulated Journal.

The drawing was taken from a boy, fourteen years of age, who had the apparatus applied to his limb for the cure of a bad case of pointed toe. The boy was placed in the sitting posture, so as to bring the sole of the foot flat upon the ground. The plate shows accurately the degree of deformity arising from the position of the foot, and also the manner in which the apparatus was applied.

1. Stirrep of the apparatus fixed to the sole of the shoe.
2. Straps for lengthening stirrup at pleasure.
3. Male screw fixed to the stirrup,
4. Female screw.
5. Pivot upon which the female screw turns.
6. A guard to keep off uneasy pressure from the knee.
7. Pad to the guard.
8. Straps for lengthening the apparatus, so that it may be suited to different lengths of limb.
9. Sliding buckle, padded, and retained in its proper situation by the inferior circular strap, (10.)
10. Two straps passed round the limb upon the sliding pads, (11)
11. Sliding pads placed just above the condyles of the femur, so as to prevent inconvenience from pressure upon the soft parts, and at the same time to keep the circular straps off the ham.

The surgeon, having properly adjusted the apparatus, regulates the action of the screw according to the nature of the case.—*Lon. Med. and Phys. Jur. Sep.* 1823.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2. *Sulphate of Quina.*—As this preparation is considered the most active form of the sulifiable principle of bark, I have subjoined the most approved formula for its preparation. Boil for half an hour two pounds of the appropriate bark in powder in sixteen points of distilled water, acidulated with two fluid ounces of sulphuric acid; strain the decoction through a linen cloth, and submit the residue to a second ebullition in a similar quantity of a cidulated water; mix the decoction, and add by small portions at a time, powdered lime, constantly stirring it to facilitate its action on the acid decoction. (half a pound is near the quantity requisite.) When the decoctions has become slightly alkaline it assumes a dark brown colour, and deposits a reddish brown floculent precipitate, which is to be separated by passing it through a linen cloth. The precipitate is to be washed with a little cold distilled water, and dried. When dry, it is to be digested in rectified spirit, with a moderate heat, for some hours; the liquid is then to be decanted, and fresh portions of spirit added till it no longer acquires a bitter taste. Unite the spiritous tinctures, and distill in a water-bath, till three fourths of the spirit employed has distilled over. After this operation, there remains in the vessel a brown viscide substance, covered by a very bitter, alkaline, and milky fluid. The two products are to be separated and treated as follows. To the alkaline liquid, add a sufficient quantity of sulphuric acid to saturate it; reduce it by evaporation to half the quantity; add a small portion of charcoal, and after some minutes ebullition, filter it whilst hot, and crystals of Sulphate of Quina will form. The brown mass is to be boiled in a small quantity of water, slightly acidulated with sulphuric acid, which will convert a large portion of it into Sulphate of Quina. The crystals are to be dried by cilubous paper. Two pound of bark will, it is said, yield 5 to 6 drachms of the Sulphate; of which 8 grains are considered equivalent to an ounce of bark.—*Paris Pharmacologia. Fifth Edition.**

3. *Case of Trismus, &c. approaching to Tetanus, supervening to a located wound, successfully treated by Acupuncturation.* By Frederick Finch, Esq. Greenwich, in a letter to Dr. Copland.

In the course of the last month, a highly respectable neighbouring practitioner (M. Bromley, of Deptford,) informed me that he was attending a patient who had fallen from a considerable height, and had received several extensive lacerated wounds on various parts of the body and scalp, and that he despaired of his recovery, in consequence of trismus, &c. having taken place, and destroyed all power of deglutition. I intimated to Mr. Bromley that, if the case were mine, I should try the effect of acupuncturation, and was permitted to accompany him to the patient's house. The patient was in a most distressing situation, with a pulse of 130; the jaw completely locked; and, from the extreme rigidity of the muscles about the throat, he was incapable of swallowing the smallest quantity of fluid.

Having obtained permission to employ the needles, I introduced one into the masseter muscle of the right side, and was much gratified to find that muscle, as well as the sterno-cleido-mastoideus, platysma myoides, and all the muscles of the neck and throat of that side, instantaneously relieved from their spasmodic contraction. Another needle was then introduced into the left masseter, and relief (though not to the same extent) was immediately afforded. Such was the effect of the operation, that before we left the room the patient took a large dose of tinct. opii and a cup of chocolate, although he had been unable to swallow any thing for some considerable time before. He is now perfectly recovered.

* According to Mr. Charles Marshall, an experienced apothecary of this city, the bark should be bruised instead of being reduced to powder, as it yields more in the latter mode.

It would be too much to assert that the same means would in every case be attended with the same fortunate effects; but in such a dangerous and fatal malady, even a distant approach to a successful remedy may lead to important discoveries, which may be promoted by inserting this case in the pages of the REPOSITORY.—*Lon. Med. Rep. Nov.* 1823.

4. *Vegetable Alkali from Rhubarb.*—M. Nani, of Milan, states that he has discovered a new vegetable alkali in rhubarb; but he has not said much of its properties, and except its solubility in weak sulphuric acid, and precipitation by lime, no evidence of its alkaline nature is offered. Six ounces of rhubarb in powder were boiled for two hours in eight pints of common water, with four drachms of sulphuric acid; this was filtered, pressed, and the residuum reboiled with six ounces of water and two drachms of sulphuric acid; the fluid being again separated, the residuum weighed but two ounces. The united infusions were mixed by degrees with three ounces of quicklime, and from being yellow they became of a blood-red colour; and after standing for a day the precipitate was filtered out, dried in the sun, and weighed six ounces. It was then digested at a high heat, with four pounds of alcohol S.G. .837 for two hours, filtered, and again digested with two pounds more of alcohol, which, when separated by a second filtration, was added to the first. Being put into a retort, five pounds of the alcohol were distilled off, and the rest of the liquor carefully evaporated to dryness. The residuum weighed two drachms, was of a red brown colour, with brilliant points throughout it. Its taste was sharp and styptic. It was soluble in water, and its odour like that of rhubarb. This preparation is recommended in pharmacy as being of constant quality of convenient solubility in water, and deprived of its inert and ligneous matter; one or two grains are said to be sufficient for a dose.—*Bib. Univ.* xxii. p. 232, *and Journal of Sciences*, No. 31.

5. *The efficacy of Oil in Cases of Poisoning by Potass.* By M. A. CHEREAU.

Case 1st.—The grand-daughter of a copper-founder, when very thirsty, drank a glassful of a solution of potass, used for scouring metals. The proportion of this alkaline solution was about sixteen ounces of red American potass to a little more than two pints of water. The liquid was of a reddish colour, which at first induced a belief that it was a mixture of wine and water, which the workmen were using; she drank it with avidity, but soon experienced great heat in the throat, with violent pains in the stomach and abdomen. M. Chereau being called in, made her take at once 10 oz. of syrup of gum, and 4 lbs. of oil of sweeet almonds. Vomiting supervened; and when it seemed to stop, the mixture was repeated; the vomiting after this was renewed, and the patient felt herself relieved. Emollient drinks and oleaginous potions, administered by spoonsful, subsequently removed all the alarming symptoms.

Case 2d.—The child of a wine merchant had drank by mistake some of the *aqua secunda* of painters (a solution of potass in water.) Nearly 3 lbs. of oil of sweet almonds were administered at two different times, and relieved the unpleasant symptoms. Vomiting occurred, as in the first instance. It was remarked in this case, that the rejected liquid was of a whitish colour, with some density, and of a saponaceous appearance. It would seem that the oil does not only act in provoking vomiting, by the nausea which it occasions, but also that it combines with potass in the stomach.—*Bulletin des Travaux de la Societe de Parmacie de Paris. Juillet*, 1823.

6. *M. Richter of Moscow's Case of Pregnancy, with Prolapsus Uteri.*

A woman, who had long laboured under a complete prolapsus uteri, it hanging down between the thighs, except when she lay in a recumbent posision—became pregnant. The pendent uterus was observed to enlarge with

the growth of the fœtus, but when she was gone about half her time, it retracted itself, and ascended upwards into the pelvis, so that about the seventh month not a vestige of the prolapsus was visible. On delivery, M. Richter found the orifice of the womb towards the left; the head entered the pelvis obliquely, and forcibly drove forth the left and anterior part of the lower segment, obstructing the passage of the urine. He made her assume a lateral posture in order to obviate the oblique position of the uterus, and drew off the urine by a catheter, keeping back during each pain, the parts which had been forced down. In this manner, he succeeded in effecting delivery. The prolapsus again appeared as soon as the patient was able to be out of bed.—*Pet. Ver. Adhand.*

7. *M. Blaquiere on Sponge, as a Cataplasm.*

When a sponge is charged with an emollient decoction, it acquires a softness and pliancy which renders it somewhat like a consistent mucilage; and besides, it applies itself with great accuracy to all the prominences and anfractuosities of a part. Evaporation is also easily prevented by a wrapper of wax-cloth, or a simple compress moistened with the same liquid, which may be renewed every five or six hours. It may be employed in all cases where emollient cataplasms are indicated, and where it is of importance to avoid weight. In fractures it is by far the best application; and in time of war, in sieges, &c. its readiness makes it invaluable.—*Gazette de Sante Paris.*

8. *M. Lavagna on Ammonia as an Emenagogue.*

Since the time of Astruc, who asserted the rare success of emenagogues, it has been considered almost hopeless to try the medicines of this class, formerly in repute. M. Lavagna has endeavoured to revive the reputation of emenagogues by proposing the injection of ammonia into the vagina. He gives 14 cases of amenorrhœa, in which this succeeded, sometimes in 24 hours, and at most in five or six days, not only to produce the discharge, but to remove the paleness, the oppression, the difficulty of breathing, the anorexia, the weakness, &c. The same success was experienced in all sorts of temperaments, plethoric, bilious, pituitous, and their complications. The proportion employed was ten or twelve drops of alkali, in two spoonfuls of warm milk, often repeated in the course of the day. It generally produced in the vagina a sensation more or less painful, according to the strength of the mixture and the sensibility of the part; but in no case was any thing dangerous or troublesome produced.—*Bib. Ital.*

9. *Observations on Tetanus.*—By D. I. H. Dickson, M. D. Physician to the Fleet.—This paper is particularly directed to the investigation of the early stage of the symptoms, and the means of prevention. Dr. D. conceives that a peculiar condition of the intestinal canal is one of the first morbid symptoms, and that an assiduous use of purgatives may have the effect of removing the tendency to the disease: to which course in particular cases and constitutions, he would add bleeding. The disease is said to have been less prevalent of late years in the West Indies than formerly, a circumstance which is attributed to the greater attention that is now paid to the evacuation of the bowels. In the less acute form of the disease, the liberal use of spirits and opium, when employed early, is frequently efficacious, but not in the *more* acute form. Of the numerous cases which occurred during the campaign in Spain, very few terminated successfully; the principal remedies employed were blood-letting, purging, opium, and digitalis. The following paragraph may deserve to be quoted:

"I trust I am therefore justified in inferring that to the improvements in the medical and surgical treatment of wounds; in cleanliness and ventilation, avoiding at the same time exposure to currents of cold air, or sudden change

of temperature; in fine, to superior comforts, diet, and accommodation; but particularly to the greater attention paid to the state of the bowels, may be attributed the great infrequency of tetanus of late in the West Indies, when compared with former wars."

The essay concludes with four valuable cases by Dr. M'Arthur, with dissections; from which the writer infers that the disease 'depends on, or at any rate is attended by, inflammation of the abdominal viscera;' for whether it be the original cause, or only a consequence of the disease, is a question which future experience and dissections can only determine. He observes that 'in severe instances of the opisthotonos, no doubt the pressure of the abdominal muscles on the contained viscera might induce inflammation, for when the muscles of the neck and back are thrown into contractions, the abdominal muscles act as antagonist muscles with great violence; and the abdomen, during the continuance of the spasm, feels hard like a board under the hand.' The inflammation assumes a very different character from that of enteritis; no adhesions being formed from effused coagulable lymph, nor any formation of pus.

A short paper by Dr. Whitlock Nicholl, gives an *Account of a Case of that curious Imperfection of Vision*, in consequence of which the patient is unable to distinguish colours. The report is similar to others that have been occasionally laid before the public; and no attempt is made to account for the fact.

In the next memoir, Dr. Henry Dewar calls the attention of the Society to the *Treatment of Sinuous Ulcers.*—After having remarked on the different methods of treatment that have been employed for their cure, the author adverts to that of compression, and observes that it has seldom been applied in a regular or scientific manner. He thinks that it is attended with most conspicuous benefit in 'extensive sinuses among the muscles of the thigh;' adverts to the plans of treatment usually adopted; states the defects of them; and then proceeds to give an account of a case in which he employed a different mode. It consists fundamentally in a pressure greatest at the remote part, and gradually declining towards the outlet of the sinus,' by which a free discharge is given to the fluid, and the healing process commences at the extremities. Dr. Dewar afterwards enters into a critical examination of the writings of preceding surgeons, and inquires how far a plan of treatment, similar to the one which he recommends, had been practised by any of them. —*Med. Chir. and Phil. Mag. Aug.* 1823.

10. We subjoin for the information of our readers the following extracts from the Report of the National Vaccine Establishment, London, 1822. (Annual Register for 1822.)

Vaccination has now been submitted to the test of another year's experience, and the result is an increase of our confidence in the benefits of it. Of small pox, in the modified and peculiar form which it assumes, when it attacks a patient who has been previously vaccinated, many cases, indeed, have been reported to us in the course of last year, and some have fallen within the sphere of our own observation; but the disorder has always run a safer course, being uniformly exempt from secundary fever, in which the patient dies most commonly, when he dies of small pox.

We learn from ample experience, that the number of cases of *small pox*, in the safe form which it is found to assume after vaccination, is by no means equal to the number of deaths by inoculation; an evidence quite irrefragable, and as it appears to us, decisive as to the incalculable advantage of the practice of the first, over that of the latter method.

Signed by H. HALFORD, *President.*
EVRARD HOME.
WILLIAM BLIZARD.
HENRY CLINE, jr.

MEDICAL INTELLIGENCE.

New Method of preserving Anatomical Preparations.

Horace H. Hayden, Esq. Surgeon Dentist, of Baltimore, has instituted a series of experiments on the pyro-liqueous acid, and its well-known properties in the preservation of animal substances from the effects of time, and the ravages of insects. We have been favoured with the examination of several anatomical specimens prepared some years ago, after the manner of Mr. Hayden, which are decidedly superior, in our estimation, to those prepared by any other process which we have heretofore seen.

In the course of his experiments on this subject, Mr. Hayden thinks he has arrived at several important results. He has not been able to discover, that the pyro-liqueous acid, separated from an empyreumatic oil which is carried over in the distillation, has any properties but those in common with the acetous acid in a highly contertiated form. It is owing to the empyreumatic oil which is held by the acid in solution, that the peculiar conservative powers of this article seems to depend.

As early as the year 1819, Mr. Hayden conceived the idea of rendering this substance subservient to the process of tanning leather. His experiments were so successful, that in 1821, he secured letters patent for this highly useful invention, and from the specimens which we have seen, we have no doubt of its eventual general application to this useful process. The empyreumatic oil when separated from the acid, or obtained without it. possesses in every respect this eminent property. Mr. Hayden has observed that, in proportion to the quantity of this oil carried over in the distillation of the acid, so will be the discoloration of the fluid, from that of a pale yellow, to a deep claret colour, in which latter state he believes it to be nearly, or quite saturated. It is the use of the acid in this form, to which we wish to call the attention of the medical profession, as a means of preserving specimens in anatomy. Imbued with this oil, the animal textures seem to be entirely defended from all the changes of time. The specimens which are in Mr. Hayden's possession, have in vain been exposed to the operations of heat and moisture. They remain after years unchanged; with the same aromatic smell first given to them by this peculiar substance. We have every reason to believe, that the use of this saturated solution, as recommended by Mr. Hayden, will be found not only eminently useful to the anatomist and the naturalist, but also in many departments of the useful arts: and we hope that this able and ingenious experimenter, who has so successfully cultivated many branches of the physical sciences, will shortly give to the public his observations on this interesting subject.

Baltimore, December 1823.

Additional Observation on Puerperal Fever, by Dr. James H. Lucas.

Sir, I have the pleasure to state to you that I have had a second case of Puerperal Fever, occasioned by the death of the child, in Utero, in which terpentine was used successfully. The umbilical chord was ruptured at its junction with the placenta. The placenta was retained by an hour glass contraction of the uterus, which resisted every effort I could make to extract it. The child and chord were both perfectly putrid, and from the cessation of its

movements when felt by its mother, must have been dead eight or nine days. This case lasted from the 9th of August to the 23d, and was at length removed by the administration of the spirits of terpentine, in doses of two tea-spoons every two hours, with one or two table-spoonsfull of oil of an evening.* Blisters, injections, astringents, and towards the conclusion of the case, with wine and water, and a decoction of bark, orange peel, and snake root were also used.

Dr. Myddleton of this city, has lately given a lecture, at considerable length, explanatory of his new theory, and practical treatment of pulmonary diseases and their usual combinations, which he has been solicited to publish and which he declined in consequence of its interfering with the arrangement of his work, as announced in the 15th Number of the Recorder We are now authorized to state, that the work is just completed, and will be put to press, provided 500 copies be engaged *before the first of February next*, otherwise it will not be published until his return to England. The price will be five dollars per copy without the inhaling apparatus, or nine dollars with it. Subscriptions will be received by the Publisher of the Medical Recorder and his agents, and by Messrs. Carey & Lea, Booksellers, Philadelphia.

Philadelphia Vaccine Institution.

The subscriber, who for several years past has been intrusted with the vaccination of the poor, under an ordinance of the Select and Common Councils, and to whom numerous applications have consequently been made for furnishing vaccine matter, has heretofore gratuitously distributed it at a considerable expense of time and labour to practitioners of medicine in this, as well as in other states of the union. Under that ordinance, it is his duty to supply the practitioners of the city; but in consequence of the increased demands from every section of the country, and with a view to accomodate with certainty the physicians of the United States, he has determined, by the advice of many of his medical friends, to open an office for the distribution of genuine vaccine virus.

JOSEPH G. NANCREDE, M. D.
Vaccine Physician under an Ordinance of the Select and Common Councils of the City of Philadelphia.
No. 151 South Tenth Street.

We entirely approve of the above plan for the distribution of vaccine matter, and do believe that the duties it enjoins will be performed by Dr. Nancrede with care and fidelity.

P. S. PHYSICK, M. D.	JOHN REDMAN COX, M. D.
N. CHAPMAN, M. D.	JOSEPH HARTSHORNE, M. D.
THOMAS C. JAMES, M. D.	JOHN A. MONGES, M. D.
WILLIAM GIBSON, M. D.	THOMAS T. HEWSON, M. D.

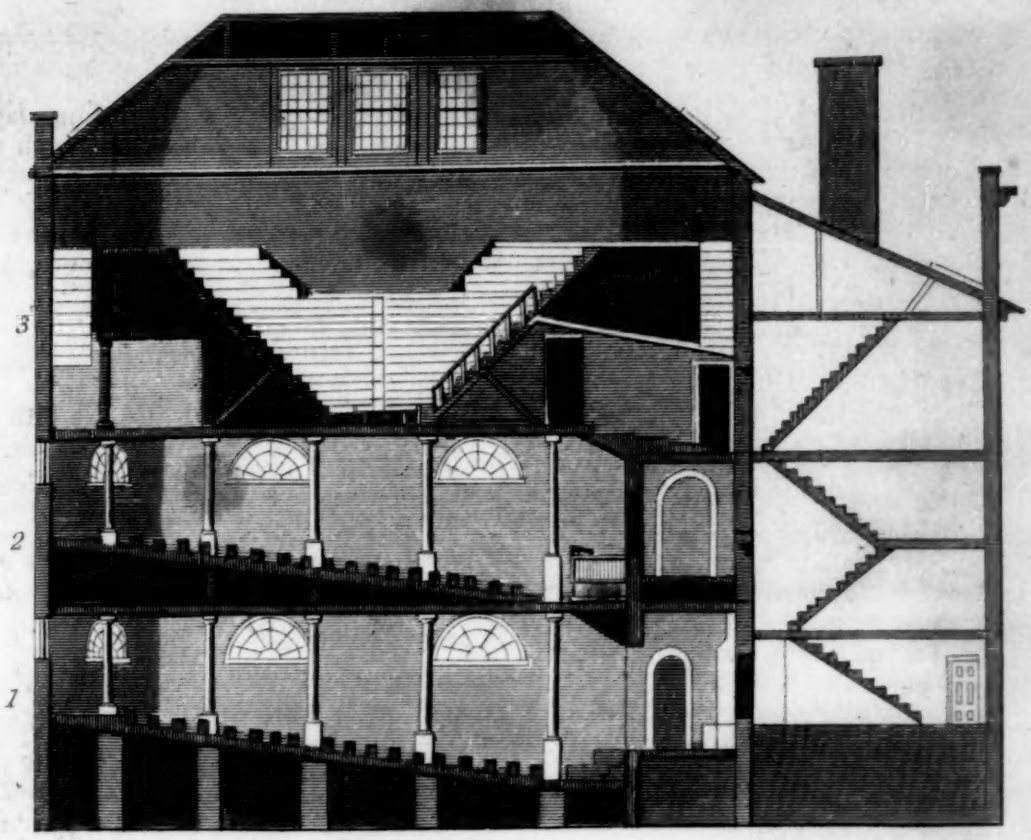
N. B. Applications by letter, post paid, enclosing three dollars, will at all times receive immediate attention.

The Editors of Medical Journals in the United States, are respectfully requested to give the above a few insertions in their respective works.

Philadelphia, May 10, 1822

* By mistake in the October No p. 615 and 16 in the statement of the case of puerperal fever, the dose was improperly given. It should have been taken as above in the text.

Plans & Longitudinal Section of the Rooms connected with the Medical Department of the University of Pennsylvania.



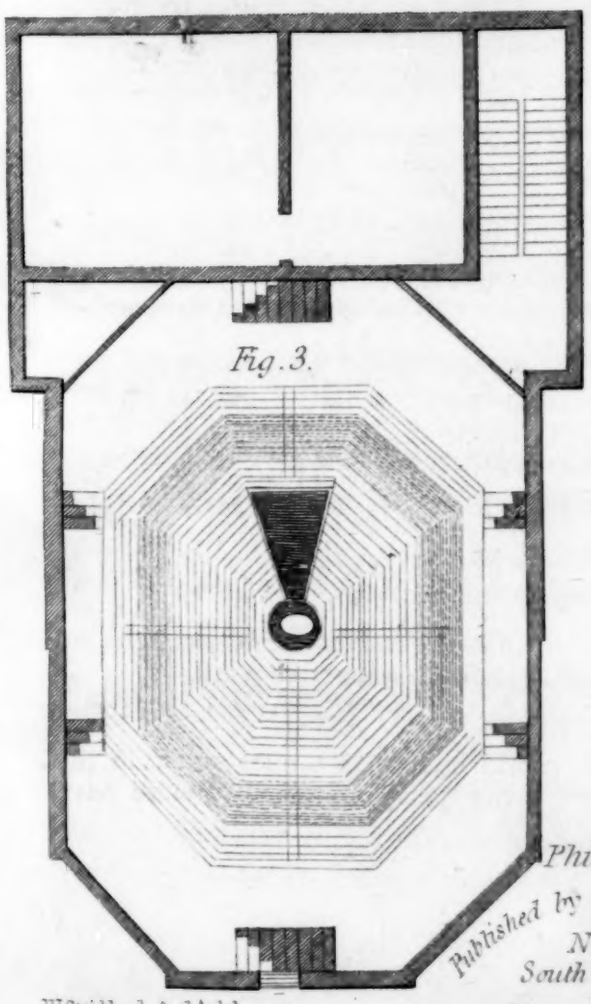


Fig. 3.

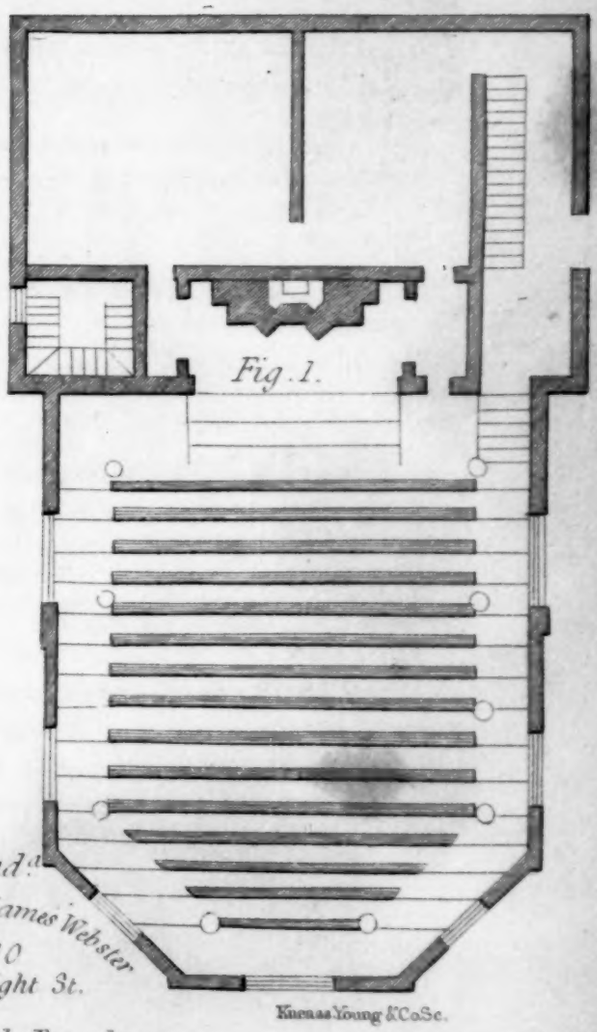


Fig. 1.

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